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PRESIDENT OF THE NORFOLK AND NORWICH MUSEUM, FROM 1849 TO 1890.

KESWICK HALL,
NORWICH.

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Birds
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R. Ridgway:
Dec. 27, 1895.

CATALOGUE

OF THE

BIRDS OF PREY

(*ACCIPITRES AND STRIGES*),

WITH THE

NUMBER OF SPECIMENS IN NORWICH MUSEUM.

BY

J. H. GURNEY, F.Z.S.

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CATALOGUE

OF THE

BIRDS OF PREY

(*ACCIPITRES* AND *STRIGES*).

CHAPTER I.

PRELIMINARY REMARKS.

My late Father, Mr. J. H. Gurney, began to turn his attention to the Birds of Prey in 1855, and in January 1856 he gave a lecture in St. Andrew's Hall, Norwich, "in illustration of the Raptorial specimens in the Museum," a group which was already ahead of any other Family of Birds there represented. This lecture was the nucleus of much subsequent study, and relates in detail the habits of the Vultures, Golden Eagle, Condor, Caracara, and Secretary Bird: from this time Hawks and Owls must have almost entirely occupied his attention, and his correspondence with contemporary Naturalists (amongst whom were Verreaux, Parzudaki, Blyth, Wolley, Swinhoe, Gould, Brooks, Tristram, Favier, and Ayres, many of whose letters remain in my possession) became large.

Tracing the growth of the Collection by the Museum Donation Book, it is evident that hardly a year passed without some important addition. The acquisition of *Machærirhamphus anderssoni* in 1865, shot by and named after the celebrated traveller, was a great impetus. The very abnormal Goshawk *Urotriorchis macrurus* (Hartlaub) procured in 1870, and at that time contained in no other Museum except Leyden, was another incentive. *Scotopelia*

ussheri, Governor Ussher's Owl, then unique, was added in 1871. *Huhua shelleyi* from West Africa, presented by Dr. R. B. Sharpe in 1872. *Archibuteo hemiptilopus*, purchased in 1874; *Dissodectes zoniventris* in 1876. *Spilornis minimus*, presented in 1877 by the Marquis of Tweeddale, confined to one group of islands, and still very rare. *Dryotriorchis spectabilis* was contributed in 1881 by the Zoological Society, in whose Gardens it had lived about a year; *Machærirhamphus alcinus* by my father in 1882; and three new American species given by the Smithsonian Institution, which always maintained very good relations with Norwich. Every year witnessed something which rendered the collection more complete, generally either given by my father or through his intervention, for he had many friends who took an interest in the growing collection, such as Jules Verreaux, A. S. Taylor of California, G. R. Gray, Prof. Newton, Mr. Gould, Dr. Hartlaub, Mr. Allan Hume, Mr. Sclater, Mr. Wallace, and Thomas Ayres of Natal, the last named of whom, in 1857 and 1858, sent twenty-seven species of Raptores to the Museum, and several more afterwards.

It is not intended here to give a biography of my Father: an admirable obituary notice by one who knew him well is to be found in the 'Ibis' (1890, p. 392), and an excellent and more extended memoir, by Mr. T. Southwell, is printed in the 'Norwich Naturalists' Transactions,' v. p. 156. But I have thought a list or recapitulation of his principal papers on Raptorial Birds would be acceptable, and they are here set down in order of date: a list of all his papers on all subjects up to 1883 is given in the Royal Society's Catalogue.

1856.

Lecture on Birds of Prey, delivered at Norwich, reported in the Norfolk newspapers for January.

On a Pied Kestrel. Morris's Naturalist, p. 141.

1857.

Honey-Buzzards in Norfolk. Zoologist, p. 5789.

Letter on Additions to the Museum. Norfolk newspapers.

1859.

Birds of Prey from Beyrout. Ibis, p. 389.
On *Scotopelia peli*. Ibis, p. 445.

1860.

On *Vultur auricularis*. Ibis, p. 171.
Notes on *Strix ascalaphus* and other birds. Bree, 'Birds of Europe,' vol. i.

1861.

Raptores from Natal. Ibis, p. 128.

1862.

The Lesser Buzzard of South Africa. Ibis, p. 361.
Aquila desmursi. Trans. Zool. Soc. p. 365.

1863.

Tinnunculus newtoni. Ibis, p. 34.
Accipiter stevensoni. Ibis, p. 447.
On different species of *Spizaëtus*. Gould, 'Birds of Asia,' vol. i.

1864.

Aquila barthelemyi. Ibis, p. 339.
Descriptive Catalogue of the Raptorial Birds in the Norfolk and Norwich Museum. Pt. I. [Never completed.]

1865.

On *Circus wolfi*. P. Z. S. p. 823.
On *Machærirhamphus*. Trans. Zool. Soc. p. 117.

1866.

On *Spilornis hoya*, etc. Ibis, p. 421.

1867.

On *Aquila chrysaëtus*, etc. Ibis, p. 465.

1868.

On *Circus spilonotus*, etc. Ibis, p. 356.

1869.

The Birds of Prey of Madagascar. Ibis, p. 443.

1870.

New Zealand Birds of Prey. Ibis, p. 535.
The Range of *Æsalon regulus* (Pall.). Zoologist, pp. 2221, 2304.

1872.

A Sketch of the Collection of Raptorial Birds in the Norwich Museum. (Jarrold.)

1875.

Notes on a Catalogue of the *Accipitres* in the British Museum. Ibis, 1875, pp. 87, 221, 353, 468. [Continued 1876, pp. 65, 230, 364, 467; 1877, pp. 209, 325, 418; 1878, pp. 84, 145, 352, 451; 1879, pp. 71, 330, 464; 1880, pp. 195, 312, 462; 1881, pp. 118, 271, 455, 547; 1882, pp. 146, 290, 436, 519.]

1877.

Buteo desertorum and *B. plumipes*. Stray Feathers, p. 65.
Lophospizias trivirgatus. Stray Feathers, p. 502.

1878.

Otogyps calvus. Stray Feathers, p. 170.
Falco babylonicus. P. Z. S. p. 2.
Polyborus tharus. P. Z. S. p. 229.
Asturinula monogrammica. P. Z. S. p. 791.

1879.

Falco atriceps. Stray Feathers, p. 424.
Accipiter gularis. Stray Feathers, p. 443.
Baza sumatrensis. Stray Feathers, p. 444.
Micrastur amaurus, etc. Ibis, p. 171.
Archibuteo hemiptilopus. Ibis, p. 178.

1880.

Dryotriorchis spectabilis. P. Z. S. p. 621.
Pernis tweeddali. Stray Feathers, p. 446.

1881.

Cooperastur and *Urospizias*. Ibis, p. 258.
Onychotes grueberi. Ibis, p. 396.

1882.

Raptorial Birds from New Britain. Ibis, p. 126.
On *Accipiter rhodogaster*, etc. Ibis, p. 452.

1883.

Ninox goldii. Ibis, p. 169.

1884.

On some Eastern Owls. Ibis, p. 169.
A List of the Diurnal Birds of Prey, with References and Annotations. (Van Voorst.)
On *Huhua nipalensis.* P. Z. S. p. 558.

1886.

On *Aquila clanga* and *A. pomarina.* The [Yorkshire] Naturalist, p. 45.
On *Pernis apivorus.* Norwich Naturalists' Trans. p. 249.

1887.

On *Accipiter stevensoni.* Stray Feathers, p. 426.
On *Falco babylonicus* and *F. barbarus.* Stray Feathers, p. 480.
Urospizias jardinei. Ibis, p. 96.
Falco babylonicus. Ibis, p. 158.

1889.

Scops capnodes. Ibis, p. 104.
Scops pryeri. Ibis, p. 302.
The Food of North-American Birds of Prey. Norwich Naturalists' Trans. p. 609.

1890.

Bubo milesi. Ibis, p. 262.

1893.

Buteo solitarius. Aves Hawaiienses, pt. v. [Posthumous.]

In 1888 Mr. James Reeve, who for 46 years has been the devoted custodian of Norwich Museum and all the avine treasures contained in it, prepared, with my father's assistance and full concurrence, a volume containing a complete catalogue of all the Birds of Prey (Hawks and Owls) therein contained. Every locality and date, the sex, collector's name, etc., where they could be obtained, are given in this

volume, which will always be of the greatest value to students at the Museum for purposes of reference. The ornithological treasures at Norwich could be watched over by no better guardian than Mr. Reeve, and my father was always ready to acknowledge his great services in the custody of this department of the Museum collection, and the scientific interest which he took in Raptorial Birds, at which they so often worked in company. I also wish to thank him for the help he has in the same way given to me, which always lightens labour and makes working at the Museum a pleasure. The whole of the Raptorial collection is now being transferred to Norwich Castle by the Corporation, where the stuffed portion is being arranged by Mr. Reeve according to my father's method, and in accordance with the scheme submitted in 1891 by Mr. P. L. Sclater, the Secretary of the Zoological Society, to the then trustees. Could my father have lived to see the transfer, in the prospect of which he took an active interest, I can imagine his feelings of pleasure at seeing it housed in its new home, which forms one of the finest Museums in England.

From Mr. Reeve's MS. Catalogue and my father's 'List of Diurnal Birds of Prey' I have compiled the two following lists, aided by my father's notes in his private copy of the above-named work, and many memoranda in his annotated copies of Dr. Bowdler Sharpe's Catalogues of the *Accipitres* and *Striges* in the British Museum, a work which was the text of some of my father's elaborated articles in the 'Ibis,' extending from 1875 to 1882.

During the four years which have elapsed since his death in April 1890, a good many new species have been published in the 'Ibis,' and other channels of information about Birds of Prey, which have not been neglected. The Lists are believed to be brought up to date, and it is hoped they may carry some weight of authority, and all the more so as being prepared with special reference to the grand collection in Norwich Museum. All the species and subspecies which are desiderata are duly interpolated.

It may be thought singular that in such a good collection, to the formation of which my father devoted the leisure of a lifetime, there should still be so many desiderata. But of late years the splitting of species and subspecies has gone on apace, and the most trifling difference, provided it is a constant one, is considered enough to entitle a bird to a Latin name of its own. The collection, however, is admitted by many distinguished men of science who have seen it to be marvellously perfect, and perhaps its strongest feature is the series which it can show of the same bird from different localities.

Before each Bird's name in the following Lists a letter is prefixed indicating to which region of the earth's surface, as named by Mr. Sclater, it belongs:—P. for Palæarctic, E. for Ethiopian, I. for Indian, A. for Australian, Nearc. for Nearctic, and Neot. for Neotropical. And New Z. for New Zealand, following the boundaries given in the map to Newton's admirable 'Dictionary of Birds;' New Zealand, however, is not one of the six regions defined by Mr. Sclater, who includes it in Australia, but says it is a "well-marked subregion" ('Ibis,' 1891, p. 534). See Professor Newton's article, 'Dictionary,' pt. ii. p. 315.

The way in which these several divisions are justified by the Birds of Prey, and especially by the Diurnal Birds of Prey, is remarkable, and if they were to be decided afresh by that class of birds alone they could not very well be improved upon. Seven-eighths of the Raptores are found in one region only,—*i. e.* not in more than one; and the region which has the greatest number is the Neotropical or South-American region, which contains 181 Hawks and Owls.

One great feature of the Raptorial series at Norwich has for years been its illustration of geographical distribution; my father did not care much for duplicates at any time unless they were from different countries. His aim was twofold,—first to show the range of the bird; and secondly the different shades and tints assumed by that same bird in different places, *e. g.* in Europe and North America. Thus, to give an example, we have, as illustrating the distribution of the

Peregrine Falcon (*Falco peregrinus*, Tunstall, *F. anatum*, Bp., *F. leucogenys*, Menzbier *), skins from :—

Norfolk (several).	
Lapland, June 1854.	J. Wolley.
Bagnères de Bigorre, France.	Phillipi.
Tangiers.	Favier.
Sakhara, Egypt.	*Per* Parzudaki.
White Nile.	,, Parzudaki.
Cape of Good Hope.	,, Verreaux.
Natal.	
Beyrout.	Lauretta.
Smyrna.	J. G. Gowzenbach.
Caspian Sea.	Hoolst.
Tiflis.	A. B. Brooke.
Eastern Siberia.	Seebohm.
Nicobar Islands.	*Per* Whitely.
India.	,, J. Gould.
Ceylon.	,, Parzudaki.
Philippines.	,, Gould.
Sandalwood or Sumba Island ('Ibis,' 1892, pp. 294, 295).	Cuming.
Sandakan, Borneo.	H. Pryer.
N.W. Formosa.	Swinhoe.
Japan.	Blakiston.
Fort Churchill, N. A.	Capt. Herd.
Saskatchewan, N. A.	*Per* Leadbeater.
Fort Kennedy, N. A.	Dr. D. Walker.
New York, N. A.	Backhouse.
New Jersey, N. A.	Cassin.
California.	*Per* Verreaux.
Mexico.	Lefevre.
Okak, Labrador.	Moravian Mission.
Greenland.	Holböll.
Yukatan.	*Per* Zool. Soc.
Panama, C. A.	Ripan.
Barbadoes, W. Indies.	Col. Feilden.
St. Croix, W. Indies.	A. Newton.
Chili.	Dr. Landbeck.
Santiago, Chili.	*Per* Boucard.

* See J. H. G. Sen., preface to 'List' p. vii.

And this enumeration does not include *F. cassini* from South America, and *F. pealei* from the North Pacific, but refers strictly to the true Peregrine, which, as a well-known British bird, and the favourite of falconers, has always been especially interesting to English bird lovers. The plumages of some of this series are commented on by my father in the 'Ibis,' 1882, p. 295, where he remarks that the Common Peregrine, like a good many other birds, appears to have two phases of plumage, a light phase and a dark phase, and whichever of the two they start with they carry through life. This is true dimorphism—as also exemplified in *Stercorarius crepidatus* and in some Owls, e. g. *Scops asio*.

The Museum can show, as explanatory of the distribution of the Owls, *Brachyotus accipitrinus* from all sorts of places, such as

Tangiers,
Erzeroum,
Shanghai,
Labrador,
Falkland Islands,
Volga River,
Yarkand,
Sandwich Islands,
Nebraska,
South Carolina,
etc.,—

fifty-two specimens in all,—and *Otus vulgaris* (the British Long-eared Owl) from widely removed localities ranging from Norfolk to Japan.

Strix in all its forms is largely represented: *S. flammea* *

* It is a lasting disgrace that, in a country like England, which professes to be highly civilized, Owls should be so much persecuted, and particularly the harmless Barn-Owl (*Strix flammea*), which is becoming quite a rare bird in the eastern counties. This is almost entirely due to excessive and indiscriminate game-preserving, but the truth is that every farmer or gamekeeper who kills a Barn-Owl slays a friend. Among the many scores of cast-up pellets and remains of Barn-Owls' meals which I have examined at various times I have never found a bird bigger than a Thrush, and that only once, while the only trace of game was the leg of one very young rabbit, and once the beak of a chicken. On the other hand, I have found mice without number, shrews sometimes, and

from England, Denmark, Heligoland, France, Spain, Madeira, Syria, Morocco, Egypt, Nubia, Abyssinia, etc.; *S. pratincola* from Mexico, Guatemala, California, Cuba, Trinidad, Granada, and Pennsylvania; *S. perlata* from Brazil, Chili, Peru, Guiana, Antioquia, Para and Ecuador, and Central America; *S. amaurota* from the Philippines; and *S. poensis* from Madagascar, Comoro Islands, and several localities in South Africa.

Forty-two kinds of *Scops* are illustrated by 243 skins, and the Neotropical *S. brasilianus* may be taken as a sample of what a good series can teach. Of this species the Museum has two reputed Chili skins, from Messrs. Verreaux and Warwick; but Mr. Sclater thinks the locality doubtful, and by his advice Chili is not included in the map which is here introduced to show the distribution of *Scops*.

The number after each Latin name in both the Lists which follow is the number of specimens, stuffed or in skin, in the Norwich Museum; and one object in publishing these numbers is to induce friends in all countries to help in supplying our desiderata to complete the collection on which my father bestowed so much time and labour.

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young rats frequently, and middle-sized rats too. When a brown Owl of any kind commits the crime of taking a Pheasant the triumphant keeper does not fail to let me know: on the 3rd of last August a well-nourished Pheasant of ten weeks old was killed by a misguided Tawny Owl (*Syrnium aluco*) and both were immediately forwarded. I tell this because it does harm to this characteristic English bird to conceal his occasional larcenies, which I maintain are more than balanced by the rats and mice he takes, and have always found this to be the true argument in his behalf.

A table of the food of eleven kinds of American Owls is given by my father in the Norwich Nat. Trans. iv. p. 616, from which it appears that *Strix pratincola*, the American Barn-Owl, was once guilty of the heinous sin of eating a Pigeon (!), a crime which has been falsely laid to the charge of its English cousin, *S. flammea*. Probably this is the same very exceptional instance quoted in Fisher's 'Hawks and Owls of the United States,' p. 139, where the subject of Owls' food is gone into and statistics given gathered from many sources.

CHAPTER II.

The Order ACCIPITRES.

DIURNAL BIRDS OF PREY.

(*Serpentariidæ, Cathartidæ, Vulturidæ, Falconidæ, Pandionidæ.*)

In 1874 Dr. Sharpe put the total number of existing species of Diurnal Birds of Prey at 377, but, according to the present List, it is now 470, of which at least 89 are only subspecies. These subspecies are indented and have their names printed in smaller type in my List, but the line between a species and a subspecies is very arbitrary. My father adopted five families, of which the fourth and largest was the *Falconidæ*, and this contained all the order except the Secretary Bird, the Osprey, and the tribe of Vultures, of which I shall have more to say later on.

The great family of the *Falconidæ* he split up into 13 subfamilies, and most of these into several genera; but the *Gypaëtinæ*, the *Gypohieracinæ*, the *Gymnogeninæ*, and *Circinæ* were only used by him for the reception of one genus each. The *Accipitrinæ*, or subfamily of Sparrow-Hawks, he made into 17 genera and 2 subgenera, one of them alone—*Accipiter*—containing no less than 27 species. Of the great subfamily of Buzzards he made 15 genera, one of them—the typical *Buteo*—with 30 species.

Eighty genera were recognized in 1874 in the 'B. M. Catalogue of Birds,' a hundred and one by my father in his 'List' ten years later; but thirty-six of these contain only one species apiece, and one of them, *Onychotes*, was afterwards merged in *Buteo*.

My father admitted some genera to which universal acquiescence would hardly be expected (*e. g.* dividing the *Polyborinæ* into six), and to a good many he assigned only

two or three species. Thirty-six of his genera hold only one species apiece, but he gave his reasons. In many cases the grounds on which the genera used by him are maintained will be found set forth in the series of papers in the 'Ibis' already referred to (commencing 1875), to which his 'List' was intended to be a sequel and an index.

Turning now to the subject of distribution, an analysis of the letters prefixed will show that 124 Diurnal Raptores have their headquarters in the rich Neotropical region of South America (43 according to Mr. Quelch occurring in British Guiana alone), and very few of them go beyond South Mexico. 102 are Ethiopian, 83 inhabit the Australian region, 78 the Indian, 51 the Palæarctic, which in geographical extent is the largest region of all, and 30 the Nearctic or North American. The contrast between North and South America, one at the head of the list and the other at the tail, is very striking in the *Accipitres*, but much less so in *Striges*. It ought to be said that a good many of the *Accipitres*—*i. e.* about 74 species—are found in more regions than one, and in this respect they are greater pluralists than the Owls. But I have not thought it well to take into account the accidental occurrence of single stragglers of either of them, which have indeed little or no real bearing on ornithic distribution. Dr. Sharpe has given nine excellent maps to show the distribution of the genera comprising the Vultures, undoubtedly a most important group (Journ. Linn. Soc., Zool. xiii. pls. i.–ix.), but I think another map is required to show the distribution of the whole family. This is here supplied, and follows Dr. Sharpe's plan, giving at a glance the entire distribution of the *Cathartidæ* in the New World and the *Vulturidæ* in the Old. It will be observed that the former do not extend to Haiti, nor the latter to Madagascar or Borneo. On the west coast of North America Lord Walsingham has shot Vultures a good bit north of Mendocino, probably the rare *Pseudogryphus californianus*, one of the five North-American birds which are becoming extinct ('Ibis,' 1891, p. 635), and the shading is carried to the 45th degree.

Before beginning the List the following very rare species, as having been added to the Collection since my father's

DISTRIBUTION OF THE VULTURIDÆ

death, may be briefly mentioned:—*Baza bismarcki*, Sharpe, from New Britain, Gazelle Island, April 19, 1891; *Baza sumatrensis* (Lafr.) from Meplè in Burma, January 1891; *Leucopternis semiplumbea*, Lawr., from Costa Rica: see particulars in the 'Ibis' for 1893, p. 340, of these three novelties. My father's remarks on eleven species of the genus *Baza* form one of his papers in the 'Ibis,' 1880, pp. 462–471; and those on the handsome South-American genus *Leucopternis* are to be found in the 'Ibis' for 1876, where he especially alludes to the great rarity of *Baza sumatrensis* and *Leucopternis semiplumbea*, which makes their acquisition the more gratifying.

In June 1893, Mr. A. Boucard received from Majunga, in the north of Madagascar, and forwarded to Norwich, a Sea-Eagle, *Haliaëtus vociferoides*, Des Murs, probably a bird in its second year, with a white tail, but not adult. It corresponds well with the figure in Des Murs' Iconogr. Orn. plate vii., which has a white chin, a rufous chest, and a dark brown back. Compared with an example of *H. vocifer*, Daudin, collected by Du Chaillu on the Ogobai River, W. Africa, apparently of the same age, also in the Museum, it is seen to differ in its rufous breast, whiter chin and cheeks, and darker nape, and the crown is more rufous. The chin, however, is not white, as in Des Murs' plate, but very pale brown.

The wing in this *H. vociferoides* is 21·50 inches, the tarsus 3·25, middle toe 3·55, tail 10·50, culmen 2·40. It has a somewhat larger beak than any of the *H. vocifer* skins in the Museum, between which and *H. leucoryphus* (Pall.) it will now take a place. In 1878 my father was not aware of a single specimen of *H. vociferoides* in England, and I have often heard him express a wish to possess one. Mr. Sclater has examined another in the Senckenbergian Museum at Frankfort ('Ibis,' 1894, p. 108), and there are three at Paris and two at Leyden, but they are very rare. 'Ibis,' 1869, p. 449; 1878, p. 453.

To Mr. C. B. Rickett the Museum is indebted for *Microhierax melanoleucus* (Blyth), from Foochow, in China, and *M. chinensis*, David (*M. sinensis*, Sharpe); but the latter is

not, in Mr. Rickett's opinion, distinct from *M. melanoleucus* ('Ibis,' 1894, p. 223). Mr. Rickett has observed that the white spot on the nape in *M. chinensis* is, when present, variable in extent, and frequently altogether absent, as in the typical *M. melanoleucus*, or it is invisible until the overlying feathers are raised. My father also notes that a *M. melanoleucus* examined by him, shot at Jaipur Kairoop, had the base and sides of one nuchal feather white, thus approaching *M. chinensis*. It may be added that Mr. Rickett's specimens have each about the same amount of black on the sides of the body, a supposed character of *M. chinensis* (*cf.* 'Ibis,' 1875, p. 254).

Krider's Buzzard (*Buteo krideri*, Hoopes), a very light-coloured race of *B. borealis*, considered a good subspecies by Mr. Witmer Stone of the Philadelphia Museum, where the types are deposited, though very common in Minnesota, has only been recently added to the collection at Norwich by the liberality of Mr. Arthur Stark. Mr. Stark shot this example on May 21, 1872, at Pelican Lake, Minnesota, and it is one of those described in 'The North-American Birds,' vol. iii. p. 284. The bird is very pale and the underparts from the chin downwards are almost pure white. The bill, as noted by Mr. Stark, was blue-black, cere pale yellow, irides brown, legs and feet pale yellow, claws black.

A large series of another American Buzzard, *Buteo swainsoni*, which was sent to the Museum for comparison, collected in Canada by Mr. D. L. Thorpe, contained a young bird shot on Sept. 18, 1893, very darkly mottled. It shows what the melanistic phase is at the age of four or five months, different, I think, from any described by my father ('Ibis,' 1889, p. 134). The dark blotches are longitudinal, and the bird, judging from its measurement, is not full-grown. I regret that Mr. Thorpe could not spare this peculiar case of melanism, but he has given us a nestling of the ordinary type, which is very useful, as we are deficient in nestlings of all kinds: also a clutch of five eggs of *Circus hudsonius*, taken on the banks of the Souris River, Assiniboia, May 26, 1893.

Mr. Thorpe's collection contained an adult female and

Nestlings of Archibuteo ferrugineus.

two nestlings of *Archibuteo ferrugineus* (Licht.), and one of the latter he has also presented. He describes the nest from which it was taken as a large structure of sticks about 3 feet in diameter, lined with dried reeds, in the fork of a tree, 25 feet from the ground. A photograph of it, taken by himself, is here reproduced (p. 15).

Through the kindness of Dr. G. Bauer the Museum has acquired a female *Buteo galapagensis* (Gould), collected by him in July 1891.

Tinnunculus alopex (Heuglin).—An adult female from Keren, Bogos, Eritrea, received through Dr. H. Giglioli. This place is forty miles from the Red Sea, and not far from Sennaar, Galabat, and Kordofan, where this fox-coloured Kestrel has been found. It has been twice figured (Cat. Birds in B. M. i. pl. xiv.*; 'Ibis,' 1861, p. 69); and specimens are preserved in the British, Leyden, Turin, Berlin, Frankfort, Stuttgart, and Vienna Museums. My father's remarks on this fine Kestrel, which comes nearest to *T. rupicoloides*, but is larger and has a longer tail, will be found in the 'Ibis,' 1881, p. 466. Count Salvadori has recorded two pairs obtained in 1871 at Sabderat, which is near Keren in the Soudan; and Emin Pasha sent home two from near the Albert Nyanza Lake, 800 miles further south (Shelley, P. Z. S. 1888, p. 47), showing that its range extends to the Equator.

Among some skins, formerly the property of the late A. J. Bruijn, two European Ospreys, *Pandion haliaëtus* (Linn.), from New Guinea, are interesting for locality's sake, and a very dark brown *Limnaëtus gurneyi* (Gray), apparently adult, an Eagle of which we had only young ones before.

SERPENTARIIDÆ.

[One genus.]

Ethiopian. *Serpentarius secretarius* (Scop.). 3†, skeleton, and eggs.

* Mr. Keuleman's picture is much lighter and yellower in tint than our bird.

† The figure after each name is the number of specimens in the Museum, as has been already stated. Detached breast-bones, skulls, and feet are not included in the enumeration of skeletons.

Cathartidæ.

[Five genera.]

Neotropical.	*Sarcorhamphus gryphus* (Linn.).	4 and egg.
Neot.*	,, *magellanicus* (Shaw).	
Neot.	*Gyparchus papa* (Linn.).	4, skel., and egg.
Nearctic.	*Pseudogryphus californianus* (S. & N.).	4, skel., and egg.
Neot., Nearc.†	*Rhinogryphus aura* (Linn.).	11 and skel.
Neot.	,, *falklandicus* (Sharpe).	2 and egg.
Neot.	,, *perniger* (Sharpe).	2.
Neot., Nearc.	,, *burrovianus* (Cass.).	5.
Neot., Nearc.	*Catharista atrata* (Bart.).	8, skel., and eggs.

Vulturidæ.

[Six genera.]

E.	*Vultur monachus*, Linn.	3 and egg.
E.	*Lophogyps occipitalis* (Burch.).	3 and skel.
E.	*Otogyps auricularis* (Daud.).	2, skel., and eggs.
E., Palæarctic.	,, *nubicus* (H. Smith).	4 and eggs.
Indian.	,, *calvus* (Scop.).	4 and egg.
P.	*Gyps fulvus* (Gmel.).	8, skel., and egg.
E.	,, *kolbii* (Daud.).	3.
I.	,, *fulvescens*, Hume.	1.
I.	,, *himalayensis*, Hume.	2.
I.	,, *indicus* (Scop.).	6.
I.	,, *pallescens*, Hume.	
I.	,, *rueppelli*, Bon.	6, skel., and egg.
I.	*Pseudogyps bengalensis* (Gmel.).	5 and skel.
E.	,, *africanus*, Salvad.	3.
E., P., I.	*Neophron percnopterus* (Linn.).	9, skel., and eggs.
I.	,, *ginginianus* (Lath.).	2 and eggs.
E.	,, *monachus* (Temm.).	4.
E.	,, *pileatus* (Burch.).	2 and skel.

* Subspecies are indented, see p. 11.

† Where a species inhabits more than one Region, that in which it is commonest is put first.

Falconidæ.

[Ninety-four genera.]

P., I. *Gypaëtus barbatus* (Linn.). 13, skel., and eggs.
E. „ *ossifragus* (Savig.). 2.
E. *Gypohierax angolensis* (Gmel.). 5 and skel.
Neot., Nearc. *Polyborus cheriway* (Jacq.). 2 and skel.
Neot. „ *tharus* (Molina). 8.
Nearc. „ *lutosus*, Ridg. 2.
Neot. *Senex australis* (Gmel.). 5, skel., and egg.
Neot. *Phalcobænus megalopterus* (Meyer). 3.
Neot. „ *carunculatus*, Des Murs. 6.
Neot. „ *albigularis* (Gould).
Neot. *Milvago chimango* (Vieill.). 5.
Neot. „ *chimachima* (Vieill.). 8.
Neot. *Daptrius ater*, Vieill. 5.
Neot. *Ibycter americanus* (Bodd.). 5.
Neot. *Herpetotheres cachinnans* (Linn.). 7 and skel.
P., I. *Circaëtus gallicus* (Gmel.). 9, skel., and egg.
E. „ *cinerascens*, Müll. 5 and skel.
E. „ *fasciolatus*, Gray. 2.
E. „ *beaudouinii*, V. & Des Murs. 7.
E. „ *pectoralis*, Smith. 13 and skel.
E. „ *cinereus*, Vieill. 8.
I. *Spilornis undulatus* (Vig.). 9 and skel.
I. „ *asturinus*, Meyer.
I. „ *albidus* (Cuv.). 6.
I. „ *spilogaster* (Blyth). 13.
I. „ *bido* (Horsf.). 2 and skel.
I. „ *davisoni*, Hume. 2.
I. „ *elgini* (Tytl.). 5.
I. „ *pallidus*, Wald. 6.
I. „ *minimus*, Hume. 1.
A. „ *rufipectus*, Gould. 6.
A. „ *sulaensis* (Schlegel). 2 and skel.
A. „ *raja*, Sharpe.
I. „ *holospilus* (Vig.). 6.
I. „ *panayensis*, Steere.
E. *Dryotriorchis spectabilis* (Schlegel). 1.

E. *Eutriorchis astur,* Sharpe.
E. *Helotarsus ecaudatus* (Daud.). 5 and skel.
E. „ *leuconotus,* Rüpp. 2.
E. *Polyboroides radiatus* (Scop.). 12.
E. „ *typicus,* Smith. 15 and skel.
P., I. *Circus cyaneus* (Linn.). 31 and eggs.
Nearc. „ *hudsonius* (Linn.). 24 and eggs.
E., I. „ *macrurus* (Gmel.). 31.
P., E., I. „ *cineraceus* (Mont.). 25, skel., and eggs.
E. „ *maurus* (Temm.). 3.
Neot. „ *cinereus* (Vieill.). 21.
Neot. „ *maculosus* (Vieill.). 7.
I. „ *melanoleucus* (Forst.). 14.
I. „ *philippinensis,* Steere.
E. „ *maillardi,* Verr. 3.
E. „ *macrosceles,* Newton. 10.
A. „ *wolfi,* Gurney. 6.
A., New Z. „ *approximans,* Peale. 16 and egg.
A. „ *spilothorax,* Salvad.
I. „ *spilonotus,* Kaup. 18.
P., I., E. „ *æruginosus* (Linn.). 32 and eggs.
E. „ *ranivorus* (Daud.). 16, skel., and eggs.
E. „ *humbloti,* M.-E. & Grand.
A. „ *assimilis* (J. & S.). 11 and egg.
Neot. *Micrastur melanoleucus* (Vieill.). 6.
Neot. „ *amaurus,* Gurney. 1.
Neot. „ *mirandollei* (Schlegel). 2.
Neot. „ *guerilla,* Cass. 7.
Neot. „ *jugularis,* Gurn. 6.
Neot. „ *ruficollis* (Vieill.). 9.
Neot. „ *zonothorax* (Cab.). 1.
Neot. „ *gilvicollis* (Vieill.). 13.
Neot. *Geranospizias gracilis* (Temm.). 5.
Neot. „ *cærulescens* (Vieill.). 3.
Neot. „ *niger* (Du Bus). 6.
E. *Urotriorchis macrurus* (Hartl.). 2.
E. *Melierax canorus* (Risl.). 8 and eggs.
E. „ *poliopterus,* Cab.

E. *Melierax polyzonus* (Rüpp.). 10 and skel.
E. „ *mechowi*, Cab.
E. „ *gabar* (Daud.). 23.
E. „ *niger* (B. & V.). 8.
E. *Asturinula monogrammica* (Temm.). 13.
P. *Astur palumbarius* (Linn.). 18, skel., and eggs.
P. „ *candidissimus*, Dyb.
Nearc. „ *atricapillus* (Wils.). 6 and egg.
Nearc. „ *striatulus*, Ridg. 2.
E. „ *hensti*, Schl. 1.
I. *Lophospizias trivirgatus* (Temm.). 17.
I. „ *rufitinctus* (M'Clell.). 8.
A. „ *griseiceps* (Schl.). 6.
E. *Nisoides moreli*, Poll.
E. *Scelospizias francesi* (Smith). 16.
E. „ *pusillus*, Gurney. 5.
E. „ *brutus* (Poll.). 1.
E. „ *polyzonoides* (Smith). 17.
I. „ *badius* (Gmel.). 28.
I. „ *poliopsis* (Hume). 7.
P. „ *cenchroides* (Severtz.). 2.
E. „ *sphenurus* (Rüpp.). 15 and skel.
P. „ *brevipes* (Severtz.). 12.
E. „ *tachiro* (Daud.). 14 and skel.
E. „ *unduliventer* (Rüpp.). 11.
E. „ *toussenelii* (Verr.). 3.
A. *Erythrospizias trinotatus* (Bon.). 10.
I., A. *Tachyspizias soloensis* (Lath.). 19.
I. „ *cuculoides* (Temm.). 2.
A. *Leucospizias novæ-hollandiæ* (Gmel.). 4.
A. „ *leucosomus* (Sharpe). 3.
A. „ *cinereus* (Vieill.). 9.
A. „ *poliocephalus* (Gray). 7.
A. *Urospizias haplochrous* (Sclat.). 8.
A. „ *albigularis* (Gray). 6.
A. „ *holomelas*, (Sharpe.)
A. „ *jardinei*, Gurn. 1.
A. „ *meyerianus* (Sharpe).
A. „ *pulchellus* (Rams.).
A. „ *etorques*, Salvad. 5.

A. *Urospizias woodfordi*, Sharpe.
A. ,, *shebæ*, Sharpe.
A. ,, *sumbaensis*, Meyer.
A. ,, *dampieri*, Gurney. 3.
A. ,, *misoriensis*, Salvad. 1.
A. ,, *pallidiceps*, Salvad.
A. ,, *hiogaster* (M. & Sch.). 7.
A. ,, *henicogrammus* (Gray). 7.
A. ,, *albiventris*, Salvad.
A. ,, *polionotus*, Salvad.
A. ,, *griseigularis* (Gray). 8.
I. ,, *natalis*, Lister. 2.
A. ,, *sharpii* (Oust.).
A. ,, *rufitorques* (Peale). 8 and eggs.
A. ,, *melanochlamys*, Salvad. 1.
I. ,, *wallacii* (Sharpe). 1.
A. ,, *sylvestris* (Wall.). 2.
A. ,, *torquatus* (Temm.). 5.
A. ,, *approximans* (V. & H.). 25 and eggs.
A. ,, *halmaheræ*, Meyer.
A. *Accipiter cirrhocephalus* (Vieill.). 11 and egg.
A. ,, *erythrauchen*, Gray. 2.
A. ,, *rubricollis*, Wall. 2.
A. ,, *rhodogaster* (Schl.). 3.
I. ,, *virgatus* (Temm.). 18.
I. ,, *affinis*, Hodg. 7.
I. ,, *rufotibialis*, Sharpe.
A. ,, *manillensis* (Meyen).
I., P. ,, *gularis* (T. & S.). 22.
E. ,, *hartlaubi* (Verr.). 3.
E. ,, *büttikoferi*, Sharpe.
E. ,, *minullus* (Daud.). 23.
E. ,, *erythropus* (Hartl.). 1.
Neot. ,, *subniger* (Vieill.). 9.
Neot. ,, *collaris* (Kaup). 1.
P. ,, *pallens*, Stejneger.
P., I. ,, *nisus* (Linn.). 64, skel., and eggs.
P. ,, *granti* (Sharpe).
I. ,, *melanoschistus*, Hume. 2.
E. ,, *madagascariensis*, Verr. 4.

E. *Accipiter ovampensis*, Gurn. 3.
Neot., Nearc. ,, *fuscus* (Gmel.). 33 and skel.
Neot. ,, *fringilloides*, Vig.
Neot. ,, *chionogaster* (Kaup). 6.
Neot. ,, *erythrocnemis*, Gray. 6.
Neot. ,, *salvini* (Ridg.).
Neot. ,, *ventralis*, Sclat. 18.
E. ,, *rufiventris*, Smith. 12.
E. ,, *melanoleucus*, Smith. 13.
Neot. *Cooperastur pileatus* (Temm.). 6.
Neot. ,, *bicolor* (Vieill.). 12.
Neot. ,, *poliogaster* (Temm.).
Nearc., Neot. ,, *cooperi* (Bon.). 12 and egg.
Nearc. ,, *mexicanus* (Swains.). 2.
Neot. ,, *gundlachii* (Lawr.).
Neot. ,, *guttatus* (Vieill.). 1.
Neot. ,, *chilensis* (Philippi). 6.
Neot. ,, *pectoralis*, Bon. 1.
A. *Erythrotriorchis radiatus* (Lath.). 2.
A. *Megatriorchis doriæ*, S. & D'Alb.
Neot. *Morphnus guianensis* (Daud.). 2.
Neot. ,, *tæniatus*, Gurn.
A. *Harpyopsis novæ-guineæ*, Salv. 1.
Neot. *Thrasaëtus harpyia* (Linn.). 4.
E. *Spizaëtus coronatus* (Linn.). 3 and skel.
Neot. ,, *tyrannus* (Max.). 5.
Neot. ,, *ornatus* (Daud.). 5.
I. *Limnaëtus nipalensis* (Hodg.). 7.
I. ,, *kelaarti* (Legge). 2.
I. ,, *cirrhatus* (Gmel.). 5.
I. ,, *ceylonensis* (Gmel.). 6.
I. ,, *philippensis* (Gurney). 2.
I. ,, *alboniger* (Blyth). 4.
I. ,, *caligatus* (Raff.). 19 and skel.
I. ,, *andamanensis* (Tytl.).
A. ,, *lanceolatus* (Bon.). 3.
A. ,, *gurneyi* (Gray). 4.
I. *Lophotriorchis kieneri* (Sparre). 6.
Neot. ,, *isidori* (Des Murs). 3.

E. *Lophoaëtus occipitalis* (Daud.). 6 and skel.
I. *Neopus malayensis* * (Temm.). 9.
Neot. *Spiziastur melanoleucus* (Vieill.). 3.
E. *Nisaëtus bellicosus* (Daud.). 5 and egg.
P., I. ,, *fasciatus* (Vieill.). 6 and skel.
E. ,, *spilogaster* (Bon.). 8 and skel.
P., E., I. ,, *pennatus* (Gmel.). 15 and eggs.
A. ,, *morphnoides* (Gould). 5.
P. I., Nearc. *Aquila chrysaëtus* (Linn.). 14, skel., and eggs.
P. ,, *barthelemyi*, Jaub. 2.
Neot. ,, *boliviana*, Boeck.
E. ,, *verreauxi*, Less. 4.
P. ,, *adalberti*, Brehm. 5.
P., I. ,, *mogilnik* † (Gmel.). 12, skel., and egg.
I. ,, *nipalensis*, Hodg. 11.
P., E. ,, *orientalis*, Cab. 7 and egg.
E., P. ,, *rapax* (Temm.). 9, skel., and eggs.
E. ,, *albicans*, Rüpp. 5.
I. ,, *vindhiana*, Frankl. 7 and eggs.
I. ,, *fulvescens*, Gray. 1.
P., I. ,, *clanga*, Pall. 20 and eggs.
P., E. ,, *pomarina*, Brehm. 7.
I. ,, *hastata* (Less.). 6.
E. ,, *wahlbergi*, Sund. 10 and skel.
A. *Uroaëtus audax* (Lath.). 6, skel., and eggs.
P. *Thalassaëtus pelagicus* (Pall.). 5.
P. ,, *branickii*, Tacz.
P., Nearc. *Haliaëtus albicilla* (Linn.). 21, skel., and eggs.
P. ,, *hypoleucus*, Stej.
Nearc. ,, *leucocephalus* (Linn.). 7 and skel.
E. ,, *vocifer* (Daud.). 8 and skel.
E. ,, *vociferoides*, Des Murs. 1.
I., P. ,, *leucoryphus* (Pall.). 5.
A., I. ,, *leucogaster* (Gmel.). 11 and egg.

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* Or *Ictinaëtus*, cf. 'Ibis,' 1894, p. 289.

† Mr. Blanford prefers the name *A. heliaca*, Sav., which he considers the oldest that can be safely used for the Imperial Eagle ('Ibis,' 1894, p. 286), with which the editor of the 'Ibis' agrees (*l. c.* p. 131).

I. *Polioaëtus ichthyaëtus* (Horsf.). 5.
I. ,, *plumbeus* (Hodg.). 3.
I. ,, *humilis* (M. & Sch.). 2.
P. *Archibuteo lagopus* (Gmel.). 17, skel., and eggs.
Nearc. ,, *sancti-johannis* (Gmel.). 11 and eggs.
Nearc. ,, *ferrugineus* (Licht.). 5.
P. ,, *hemiptilopus*, Blyth. 3.
P., I. *Buteo leucocephalus*, Hodg. 2.
P., I., E. ,, *ferox* (Gmel.). 20, skel., and egg.
P., I. ,, *plumipes* (Hodg.). 29.
E., P., I. ,, *desertorum* (Daud.). 37 and eggs.
P. ,, *vulgaris*, Leach. 19, skel., and eggs.
E. ,, *brachypterus*, Pelz. 8.
A. ,, *solitarius*, Peale. 3.
E. ,, *auguralis*, Salv. 1.
E. ,, *augur*, Rüpp. 13.
E. ,, *jackal* (Daud.). 17, skel., and eggs.
Nearc., Neot. ,, *borealis* (Gmel.). 10.
Nearc. ,, *harlani* (Aud.). 1.
Nearc., Neot. ,, *calurus*, Cass. 28, skel., and egg.
Nearc. ,, *krideri*, Hoopes. 1.
Neot. ,, *costaricensis*, Ridg. 1.
Neot. ,, *socorroensis*, Ridg.
Nearc. ,, *lineatus* (Gmel.). 5.
Nearc. ,, *alleni*, Ridg. 10.
Nearc. ,, *elegans*, Cass. 3.
Neot., Nearc. ,, *abbreviatus*, Cass. 2.
Neot., Nearc. ,, *pennsylvanicus* (Wils.). 35.
Nearc., Neot. ,, *swainsoni*, Bon. 11.
Neot. ,, *albicaudatus*, Vieill. 19.
Neot. ,, *colonus*, Berlepsch.
Neot. ,, *hypospodius*, Gurney. 3.
Neot. ,, *pœcilochrous*, Gurn.
Neot. ,, *erythronotus* (King). 13 and eggs.
Neot. ,, *exsul*, Salvin. 1.
Neot. ,, *poliosomus* (Q. & G.). 9.
Neot. ,, *galapagensis* (Gould). 1.
Neot. *Antenor unicinctus* (Temm.). 5.

Neot., Nearc. *Antenor harrisi* (Aud.). 3 and skel.
Neot. *Buteola brachyura* (Vieill.). 7.
Neot. „ *leucorrhoa* (Q. & G.). 7.
Neot. *Rupornis magnirostris* (Gmel.). 18.
Neot. „ *ruficauda* (Sc. & Sa.). 9.
Neot. „ *gracilis*, Ridg.
Neot. „ *nattereri* (Sc. & Sa.). 6.
Neot. „ *saturata* (Sc. & Sa.).
Neot. „ *pucherani* (Verr.). 4.
Neot. „ *ridgwayi*, Cory. 2.
I. *Butastur teesa* (Frankl.). 17 and egg.
I., P. „ *indicus* (Gmel.). 24.
I., A. „ *liventer* (Temm.). 7.
E. „ *rufipennis* (Sund.). 5.
Neot. *Asturina nitida* (Lath.). 9.
Neot. „ *plagiata* (Licht.). 7 and skel.
Neot. *Geranoaëtus melanoleucus* (Vieill.). 8 and skel.
Neot. *Leucopternis princeps*, Sc. & Sa.
Neot. „ *palliata* (Natt.). 5.
Neot. „ *ghiesbreghti* (Du Bus). 3.
Neot. „ *albicollis* (Lath.). 4.
Neot. „ *occidentalis*, Salv.
Neot. „ *lacernulata* (Temm.). 5.
Neot. „ *melanops* (Lath.). 5.
Neot. „ *superciliaris*, Pelz. 2.
Neot. „ *semiplumbea*, Lawr. 1.
Neot. „ *plumbea*, Salv.
Neot. „ *schistacea* (Sund.). 9.
Neot. *Urubitinga anthracina* (Licht.). 9.
Neot. „ *gundlachii*, Cab.
Neot. „ *zonura* (Shaw). 9.
Neot. „ *ridgwayi*, Gurn. 1.
Neot. *Harpyhaliaëtus solitarius* (Tschudi). 2.
Neot. „ *coronatus* (Vieill.). 1.
Neot. *Heterospizias meridionalis* (Lath.). 5.
Neot. *Buteogallus æquinoctialis* (Gmel.). 5.
Neot. *Busarellus nigricollis* (Lath.). 7.
I. *Haliastur indus* (Bodd.). 11.
I., A. „ *intermedius*, Gurn. 15 and skel.

A.	*Haliastur girrenera* (V. & O.). 14 and egg.
A.	*Ictinoaëtus sphenurus* (Vieill.). 11 and eggs.
P.	*Milvus ictinus*, Savig. 10, skel., and eggs.
P., I.	,, *melanotis*, T. & S. 32.
I.	,, *govinda*, Sykes. 19 and eggs.
A.	,, *affinis*, Gould. 9.
P.	,, *migrans* (Bodd.). 10 and eggs.
E.	,, *ægyptius* (Gmel.). 24, skel., and eggs.
A.	*Lophoictinia isura* (Gould). 3 and eggs.
A.	*Gypoictinia melanosternon* (Gould). 4 and eggs.
Nearc., Neot.	*Elanoides furcatus* (Linn.). 6.
E.	*Nauclerus riocouri* (V. & O.). 4.
Neot.	*Gampsonyx swainsoni*, Vig. 6.
E., I., P.	*Elanus cæruleus* (Desf.). 19 and skel.
I., A.	,, *hypoleucus*, Gould. 12.
A.	,, *axillaris* (Lath.). 6.
Neot., Nearc.	,, *leucurus* (Vieill.). 5.
A.	,, *scriptus*, Gould. 7.
Nearc.	*Ictinia mississipiensis* (Wils.). 3.
Neot.	,, *plumbea* (Gmel.). 11.
Neot.	*Rostrhamus hamatus* (Ill.).
Neot.	,, *sociabilis* (Vieill.). 15.
E.	*Machærirhamphus anderssoni* (Gurney.). 1.
E.	,, *revoili*, Oustalet.
A., I.	,, *alcinus*, West. 2.
P., E.	*Pernis apivorus* (Linn.). 16, skel., and egg.
P.	,, *orientalis*, Taczanowski.
I.	,, *ptilorhynchus* (Temm.). 37.
I.	,, *tweeddalii*, Hume.
A.	,, *celebensis*, Wald. 2.
A.	*Henicopernis longicauda* (Garnot). 5.
A.	,, *infuscata*, Gurn. 0 *.
Neot.	*Regerhinus uncinatus* (Temm.). 10.
Neot.	,, *megarhynchus*, Des Murs. 4.

* Our specimen, which was the type, has unfortunately been lost or destroyed since my father's death.

Neot. *Regerhinus wilsoni* (Cass.).
Neot. *Leptodon cayennensis* (Gmel.). 8.
E. *Baza madagascariensis* (Smith). 5.
E. „ *cuculoides* (Swains.). 2.
E. „ *verreauxii* (Lafr.). 9.
A. „ *subcristata* (Gould). 7.
A. „ *reinwardti* (M. & S.). 18.
A. „ *gurneyi*, Ramsay. 1.
A. „ *bismarcki*, Sharpe. 1.
A. „ *timorlaensis*, Meyer.
A. „ *rufa*, Schl. 8.
I. „ *sumatrensis* (Lafr.). 1.
A. „ *leucopais*, Sharpe.
A. „ *erythrothorax*, Sharpe. 4.
A. „ *magnirostris*, Gray.
I. „ *ceylonensis*, Legge. 3.
I. „ *lophotes* (Temm.). 7.
Neot. *Harpagus diodon* (Temm.). 8.
Neot. „ *bidentatus* (Lath.). 16.
Neot. „ *fasciatus*, Lawr. 5.
I. *Microhierax fringillarius* (Drap.). 14.
I. „ *latifrons*, Sharpe. 3.
I. „ *cutolmus* (Hodgs.). 8.
I. „ *erythrogenys* (Vig.). 4.
I. „ *melanoleucus* (Blyth). 2.
E. *Poliohierax semitorquatus* (Smith). 4.
I. „ *insignis*, Walden. 4.
Neot. *Spiziapteryx circumcinctus* (Kaup).
E. *Dissodectes ardesiacus* (B. & V.). 4.
E. „ *dickinsoni*, Scl. 3.
E. „ *zoniventris* (Peters). 6.
New Z. *Harpe novæ-zealandiæ* (Gmel.). 1.
New Z. „ *brunnea* (Gould). 8.
A. *Hieracidea orientalis* (Sch.). 7 and eggs.
A. „ *novæ-guineæ*, Meyer.
A. „ *berigora* (V. & H.). 9 and egg.
P., E., I. *Tinnunculus alaudarius* (Gmel.). 40, skel., and eggs.

P.	*Tinnunculus*	*neglectus* (Sch.). 11.
I.	,,	*saturatus* (Blyth). 11.
P., I.	,,	*japonicus* (T. & Sch.). 23.
P.	,,	*canariensis*, Kœnig.
E.	,,	*rupicolus* (Daud.). 16 and skel.
A., I.	,,	*moluccensis*, H. & J. 17.
E.	,,	*rupicoloides* (Smith). 13 and eggs.
E.	,,	*arthuri*, Gurn. 1.
E.	,,	*alopex* (Heugl.). 1.
A.	,,	*cenchroides* (V. & H.). 8 and egg.
E.	,,	*punctatus* (Temm.). 9.
E.	,,	*newtoni*, Gurney. 22 and egg.
E.	,,	*gracilis* (Less.). 6.
Nearc., Neot.	,,	*sparverius* (Linn.). 34, skel., and egg.
Neot.	,,	*brevipennis*, Berlepsch.
Nearc.	,,	*deserticolus* (Mearns). 1.
Neot.	,,	*peninsularis* (Mearns).
Neot.	,,	*australis* (Ridgway).
Neot.	,,	*cinnamomimus* (Swains.). 22.
Neot.	,,	*æquatorialis* (Mearns).
Neot.	,,	*caribbæarum* (Gmel.). 14 and eggs.
Neot.	,,	*isabellinus* (Swains.). 14.
Neot.	,,	*dominicensis* (Gmel.). 6.*
E., P.	,,	*cenchris* (Naum.). 20 and eggs.
E., I.	,,	*pekinensis* (Swin.). 6.
E., P.	*Erythropus*	*vespertinus* (Linn.). 16 and eggs.
I., E.	,,	*amurensis* (Radde). 16.
E.	*Hypotriorchis*	*concolor* (Temm.). 10.
E., P.	,,	*eleanoræ* (Gené). 15.
P., I., E.	,,	*subbuteo* (Linn.). 23, skel., and eggs.

* Two of these are *T. sparverioides* (Vig.), from Cuba, but, following Mr. R. Ridgway's latest opinion ('Auk,' 1891, p. 113), I unite them.

E. *Hypotriorchis cuvieri* (Smith). 3.
I., A., „ *severus* (Horsf.). 8.
A. „ *papuanus*, (Meyer.)
A. „ *lunulatus* (Lath.). 11.
Neot. „ *fusco-cærulescens* (Vieill.). 9.
Neot. „ *rufigularis* (Daud.). 8.
Neot. „ *deiroleucus* (Temm.). 3.
P., E., I. *Æsalon regulus* (Pall.). 32, skel., and eggs.
Nearc., Neot. „ *columbarius* (Linn.). 16 and skel.
Nearc. „ *richardsoni* (Ridg.). 5.
Nearc. „ *suckleyi* (Ridg.). 2.
I. *Chicquera typus*, Bon. 7 and egg.
E. „ *ruficollis* (Swains.). 14 and eggs.
I. *Falco peregrinator*, Sund. 10.
I. „ *atriceps*, Hume. 1.
P., E., I., Neot. „ *peregrinus*, Tunst. 60, skel., and eggs.
Neot., P. „ *pealei*, Ridg. 2.
Neot. „ *cassini*, Sharpe. 1.
A., I. „ *melanogenys*, Gould. 14 and egg.
I. „ *ernesti*, Sharpe.
E. „ *minor*, Bon. 13.
P. „ *punicus*, Levaill. 9 and skel.
P., E. „ *barbarus*, Linn. 6 and skel.
I. „ *babylonicus*, Gurn. 8.
E., P. „ *feldeggii*, Schl. 19 and egg.
E. „ *tanypterus*, Schl. 8.
E. „ *biarmicus*, Temm. 16.
I. *Gennaia juggur* (Gray). 12, skel., and egg.
P., I. „ *saker* (Gmel.). 15 and skel.
P. „ *gurneyi*, Menzbier.
Nearc. „ *mexicana* (Schl.). 6.
A. „ *hypoleuca* (Gould). 5 and egg.
A. „ *subniger* (Gray). 2 and egg.
Nearc. *Hierofalco labradorus* (Aud.). 1.
P., Nearc. „ *gyrfalco* (Linn.). 17 and eggs.
Nearc. „ *obsoletus* (Gmel.).
P. „ *islandus* (Gmel.). 7 and skel.
Nearc. „ *holbœlli*, Sharpe. 13.
Nearc., P. „ *candicans* (Gmel.). 22.

Pandionidæ.

[One genus.]

P., E., I., A.	*Pandion*	*haliaëtus* (Linn.).	16, skel., and eggs.
Nearc., Neot.	„	*carolinensis* (Gmel.).	13.
A.	„	*leucocephalus*, Gould.	8 and eggs.

The following are at present the principal Desiderata in the Norwich Museum, being for the most part well-marked species, but there are a vast number of eggs which are still wanting to make that part of the collection complete :—

Gyps pallescens, Hume.—Paler, as Mr. Blanford informs me, than *G. indicus*, and stated to differ in the arrangement of the down and feathers about the head. (Stray Feathers, 1878, p. 166.)

Eutriorchis astur, Sharpe.—A small crested bare-legged Harrier-Eagle from Mangoro, in Madagascar, remarkable for its short wings and long tail, on which there are about eight bars. (Ibis, 1878, p. 88.)

Nisoides moreli, Pollen.—Found in Mayotte Island, but Lantz got it in Madagascar: a typical Sparrow-Hawk, and, judging from Milne-Edwards and Grandidier's plate, coming very near to *Scelospizias francesi* ; but see Ibis, 1875, p. 366.

Urospizias.—It will be seen from the enumeration, p. 20, that no less than eleven *Urospizias*, if they all hold good, are wanting, all inhabiting the Australian Region, viz., *U. meyerianus, U. pulchellus, U. pallidiceps, U. polionotus, U. albiventris, U. sharpii, U. holomelas, U. woodfordi, U. shebæ, U. halmaheræ, U. sumbaensis.*

Accipiter fringilloides, Vigors.—A paler bird than *A. fuscus*, inhabiting Cuba and Hispaniola, and figured in Cory's 'Birds of Haiti,' a species which I believe my father never saw and which I have tried in vain to obtain.

Accipiter salvini, Ridgway : Venezuela.—Perhaps the same as *A. chionogaster* ; cf. Ibis, 1892, p. 328.

Accipiter rufotibialis, Sharpe : Borneo.—Figured Ibis, 1889, p. 68.

Cooperastur poliogaster, Temm.—A very rare Brazilian Hawk, allied to *C. bicolor*: cf. Ibis, 1881, p. 258.

Cooperastur gundlachii, Lawrence: Cuba.—Differs from *C. cooperi* in its ash-coloured breast and sides when adult, and in having less white on the under surface. (*Cf.* 'Studies of American Falconidæ,' 1876.) Ibis, 1875, p. 469.

Megatriorchis doriæ, Salvadori: Eastern New Guinea.—Figured in Sharpe's 'Birds of New Guinea,' i. pl. iii., where it is stated to have also been obtained in Northern Australia. Dr. Sharpe gives the following measurements:—Length 20 inches, culmen 1·05, wing 12·8, tail 10·0, tarsus 3·1. Eyes chestnut-brown; tarsi bare. General colour above glossy black in the adult, brown barred with lighter brown in the young. Ibis, 1878, p. 87.

Morphnus tæniatus, Gurney.—Apparently the only specimen known is the type obtained by the late Mr. C. Buckley in Ecuador, figured in the 'Ibis' for 1879, pl. iii.

Thalassaëtus branickii, Tacz.: the Corea.—A young one now in the Zoological Gardens seems exactly the same size and bulk as a Sea-Eagle (*H. albicilla*) in the next cage, and is black all over including the tail, but the under surface of the primaries flecked with white. The thighs, rump, and wing-coverts, which are white in *T. pelagicus*, are said to continue quite black in *T. branickii*, even when fully adult, and they are so depicted in 'Der zoologische Garten,' xxxv. Jahrgang, 1894, by Dr. H. Bolau. Canon Tristram alludes to a pure black Eagle, *T. branickii*, in the menagerie of Père Heude (Ibis, 1891, p. 471) * at Shanghai.

Rupornis gracilis, Ridg.—Mr. Ridgway writes that *R. gracilis*, inhabiting Cozumel Island, between Cuba and Yucatan, is a strongly marked race of *R. magnirostris*, but in Proc. U.S. Nat. Mus. 1885, p. 94, he says it is similar to the northern race of *R. ruficauda* (*R. griseocauda*, of which we have 2) but smaller.

* The latter informs me that in 'The Naturalist,' 1887, he has described, under the name of *Haliaëtus niger*, an Eagle from Kamtschatka, larger than *H. albicilla*, all black except the tail, which is pure white and tapering.

Leucopternis princeps, S. & S.: Costa Rica.—Type figured P. Z. S. 1865, pl. xxiv. *Cf.* Ibis, 1876, p. 67.

Leucopternis occidentalis, Salvin: Ecuador.—More plumbeous than *L. albicollis*. Ibis, 1876, p. 496.

Leucopternis plumbea, Salvin: Central America.—Ibis, 1876, p. 475.

Rostrhamus hamatus: Illiger.—Inhabits the northern countries of South America, and is distinguished from *R. sociabilis* by its smaller size and more plumbeous coloration. Ibis, 1879, p. 338.

Pernis tweeddalii, Hume: Sumatra and Malay Peninsula.—Figured in 'Stray Feathers,' x. p. 513. *Cf.* Ibis, 1880, p. 213.

Regerhinus wilsoni, Cassin.—Peculiar to Cuba, where Stolzmann says it is known under the name of "Caracollero," or Snail-bird. Ibis, 1880, p. 321.

Spiziapteryx circumcinctus (Kaup).—A small white-rumped Hawk with an amber eye, found in the Argentine Republic, figured in 'The Ibis' for 1862, p. 23. About five more have been obtained since my father's remarks were published (Ibis, 1881, p. 275), at which time only three were known.

Spilornis panayensis, Steere.—Inhabits Negros Island and Panay in the Philippines (Ibis, 1891, p. 305), but Mr. W. E. Clarke has pointed out that *S. holospilus* is also found in Negros (Ibis, 1894, p. 531). Two of *S. holospilus* sent my father by Mr. A. H. Everett from Zamboanga and South Leyte are an inch less in the wing than our other four specimens, and smallness is one of the characters given by Dr. Steere for *S. panayensis*, but they are not any paler.

CHAPTER III.

The Order STRIGES.

NOCTURNAL BIRDS OF PREY.

(*Asionidæ* and *Strigidæ*.)

The genera adopted at the Museum by my father for the *Striges*, which differ a good deal from Dr. Sharpe's, have, with one exception, been adhered to in what follows, but it must not be held that his opinion was altogether matured about Owls. In the Norwich Museum they stand divided into two classes, the Horned and the Horniess, the latter concluding with the Barn-Owl (*Strix*) and its allies, but by Prof. Newton's advice *Photodilus* is in this List placed before *Strix* *. Mr. Beddard considers that it comes nearest to *Syrnium* (Ibis, 1890, p. 303), and I find a reference in my father's hand apparently approving of this allocation.

While swayed to some extent by considerations of appearance and plumage, my father would probably have been of the same opinion as Prof. Newton (Yarrell's B. B. i. p. 149), that the real ear was more important than any horn of feathers. Yet he was not one to alter a museum arrangement until he saw something better; and thus he left the Owls as he at first arranged them, and described them in his popular 'Sketch of the Collection of Raptorial Birds in the Norwich Museum,'—a little work which had a local circulation a good many years ago, but is not much known beyond Norfolk. Yet I have reason to think he had in his mind a revision of some sort.

This being so, I am justified in making some slight alterations in his sequence of species, and in a few cases I have thought it better to avail myself of other people's later researches to alter a name, which indeed occasionally his own memoranda authorize.

* See Newton's 'Dictionary,' p. 672.

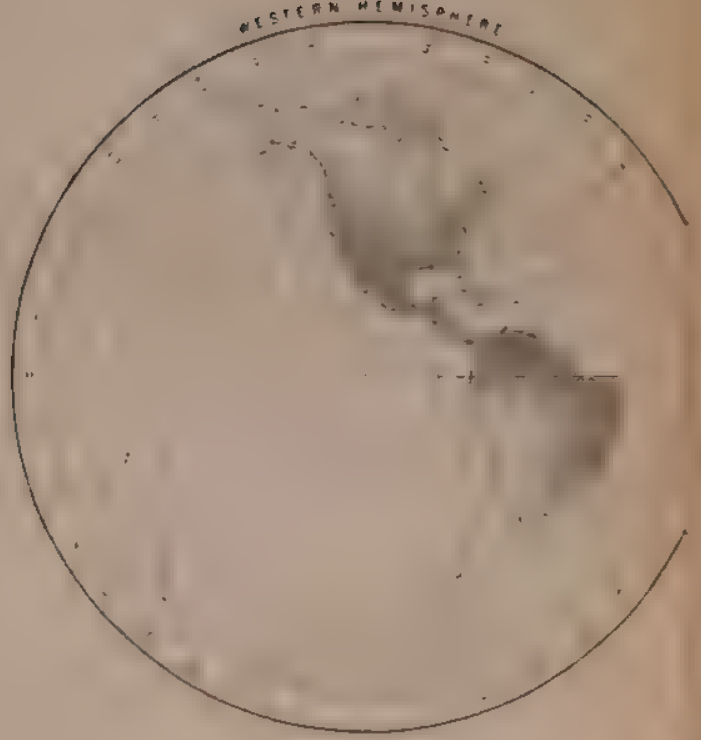
In 1875 Dr. Sharpe put the total number of existing species of Owls at 190. Some of these "species" have since been merged into other species, but nevertheless species-making has gone on at such a great rate since Sharpe's Catalogue was issued, that 78 more Owls have been furnished with names.

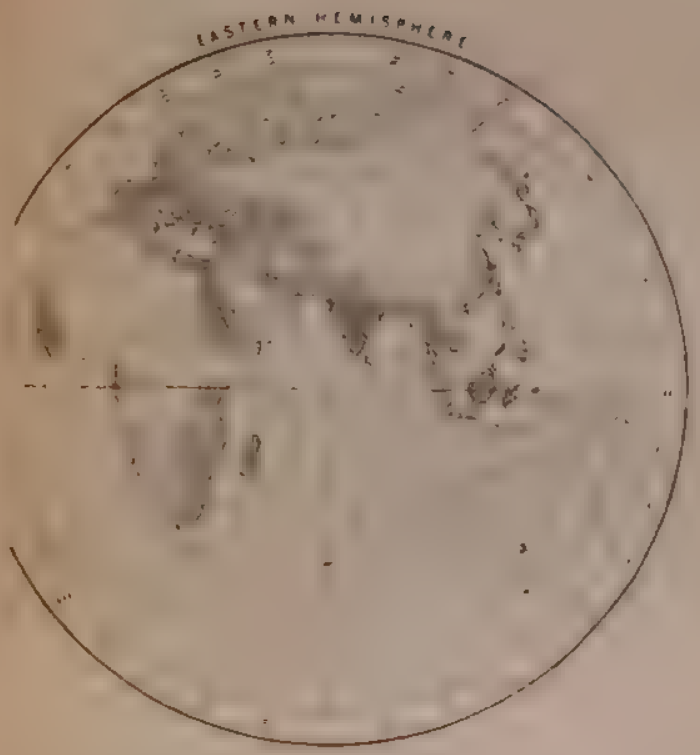
The total number at the present time is 268, of which 87 appear not to rise above the grade of subspecies, which, according to the American plan, would have trinomial appellations.

What seem to be only subspecies are in the following List distinguished by being indented and printed in smaller type, but it is confessedly very difficult to draw the line.

19 genera are recognized by Dr. Sharpe, 41 by my father—some of them small, some very large. One genus alone, the genus *Scops*, swollen by recent additions, contains 25 species and 37 subspecies, not counting *Heteroscops*, *Gymnoscops*, and *Pseudoscops*: on the other hand, *Ptilopsis*, *Urrua*, *Nyctea*, *Gisella*, *Heteroglaux*, and *Heliodilus* at present contain only one species apiece.

73 Owls appear to be assignable to the Indian region, 58 to the Neotropical, 43 to the Australian, 33 to the Ethiopian, 33 to the Nearctic, 24 to the Palæarctic, 3 to New Zealand, and 1, the Short-eared Owl, *Brachyotus accipitrinus*, is nearly cosmopolitan, even if *B. galapagoensis* and *B. portoricensis* are admitted to be distinct subspecies. There are only 12 Owls whose distribution makes them assignable to more than one region. The ascendency of India is in part due to the genus *Scops*, which is largely represented in that Oriental region. On the other hand there are some genera, such as *Cicaba*, *Macabra*, *Pulsatrix*, *Pholeoptynx*, *Gymnoglaux*, and *Glaucidium*, which are almost entirely Neotropical, a region considered by Mr. Sclater to be "pre-eminently well-marked" in all species of birds. This puts the Neotropical Owls second in order of number. The *Strigidæ* are most known in the Indian and Australian regions, but are barely represented in the Nearctic by *S. pratincola*, and in the Palæarctic by *S. flammea*. Dr. Sharpe has given





DISTRIBUTIO N OF SCOPS

three maps to show the distribution of the Strigidæ (Orn. Misc. i. p. 299), which are very valuable; and a similar map is here introduced shaded to show the distribution of *Scops*, the largest genus and the most universally diffused of any. Perhaps in time *Scops* will be found to spread all over Africa and the south of Asia in greater or less abundance, as that country becomes more and more explored. The North-American geographical races of *Scops* are in themselves a study, and the public are indebted to Mr. Edwin Hasbrouck for his two maps ('Auk,' 1893, p. 264), showing their range and, what is even more important, the areas of intergradation.

I will now mention a few Owls received at the Museum since my father's death; and first, the handsome bay *Heliodilus soumagnei*, Gr., a valuable contribution sent from Madagascar by the Rev. J. Wills, to whom my father was indebted for many Birds of Prey. It comes from the forests of Imerina, and is an adult example, apparently, killed in March, but must be rare there, as this is the only one Mr. Wills has ever seen. It differs from Dr. Sharpe's specimen (P. Z. S. 1879, p. 175) in that its toes are covered with hair, smaller and finer than in *Strix flammea*, but the barbules of the outer web of the first primary are separated at the edge in the same way. In my bird the wing measures only 7·5 inches and the tarsus 1·8. The skull of *Heliodilus soumagnei* is symmetrical, as shown in Milne-Edwards and Grandidier's plate (Oiseaux, pl. 36 c), where it is figured in three different aspects; and the foot is also figured (36 d).

To the liberality of Mr. Henry Seebohm we are indebted for *Scops elegans* (Cass.) from the Loo Choo Islands, obtained by the late Mr. Pryer, and the same specimen described by my father in the 'Ibis' for 1889, p. 303.

Another addition is *Scops sibutuensis*, collected by Mr. Everett in the Philippines, described as new by Dr. Sharpe ('Ibis,' 1894, p. 121). It is extremely close to the *S. elegans*, given by Mr. Seebohm ('Ibis,' 1894, p. 342), but the belly is not quite so grey, and the wing is ½ inch smaller.

The Museum has also to acknowledge a small Australian Owl from Canon Tristram, labelled "*Ninox albaria*, Ramsay; Norfolk Island, Dr. P. H. Metcalf, 1890." It is somewhat less rufous than our specimen of *N. maculata*, which was compared by my father with one of Dr. Crowfoot's (*cf.* 'Ibis,' 1885, p. 139), but Mr. Reeve and I judge it to be the same. It may be, therefore, that we still require the true *N. albaria*, which probably does not extend to Norfolk Island (*cf.* 'Ibis,' 1889, p. 257).

Asionidæ.

[Thirty-eight genera.]

Ethiopian.	*Phasmoptynx major* (Schl.). 8*.
E.	„ *capensis* (Smith). 10, skeleton, and eggs.
Neotropical.	„ *stygius* (Wagl.).
P., E., I., Nearc., Neot.	*Brachyotus accipitrinus* (Pall.). 51, skel., and eggs.
† Neot.	„ *portoricensis* (Ridg.).
P., Indian.	*Otus vulgaris*, Fleming. 14, skel., and eggs.
Nearctic.	„ *wilsonianus*, Less. 7.
Neot.	„ *clamator* (Vieill.). 7.
E.	„ *madagascariensis*, Smith. 5.
E.	*Ptilopsis leucotis* (Temm.). 11 and eggs.
I.	*Heteroscops luciæ* (Sharpe). 1.
Palæarctic.	*Scops semitorques*, T. & S. 16.
I.	„ *erythrocampe*, Swin. 1.
I.	„ *pryeri*, Gurney. 1.
I.	„ *elegans* (Cass.). 1.
I.	„ *mantananensis*, Sharpe.
I.	„ *sibutuensis*, Sharpe. 1.
I.	„ *glabripes*, Swin. 5.
I.	„ *hambroecki*, Swin. 1.
I.	„ *spilocephalus*, (Blyth.) 4.
E.	„ *leucopsis* (Hartl.).

* The number after each name is the number of specimens in the Museum.

† Subspecies are indented and printed in smaller type.

I.	*Scops lettia*, Hodg. 11.		
I.	,, *malabaricus*, Jerd. 15.	*	
I.	,, *lempiji*, Horsf. 18.	*	
E.	,, *rutilus*, Pucher. 3.		
E.	,, *capnodes*, Gurn. 3.		
A.	,, *magicus*, Müll. 2.		
A.	,, *bouruensis*, Sharpe. 2.		
I.	,, *brookii*, Sharpe.		
A.	,, *morotensis*, Sharpe. 4.		
A.	,, *leucospilus*, Gray. 4.		
A.	,, *menadensis*, Q. & G. 4.		
P.	,, *brucii*, (Hume.) 2.		
P., I.	,, *japonicus*, T. & S. 19.		
P., E.	,, *giu* (Scop.). 12 and egg.	†	
I.	,, *sunia*, Hodg. 9.	†	
I.	,, *nicobaricus*, Hume.	†	
I.	,, *pennatus*, Hodg. 6.	†	
I.	,, *balli*, Hume.		
I.	,, *longicornis*, Grant.		
I.	,, *malayanus*, Hay. 5.		
I.	,, *minutus*, Legge. 2.		
E.	,, *senegalensis*, Sw. 6.		
E.	,, *capensis*, Smith. 4.		
I.	,, *sagittatus* (Cass.). 3.		
A.	,, *beccarii*, Salv.		
I.	,, *solokensis* (Hartert).		
I.	,, *everetti*, Tweed.		
I.	,, *rufescens* (Horsf.).		
Neot.	,, *barbarus*, Scl. & S.		
Neot.	,, *nudipes* (Vieill.). 1.		
Neot.	,, *cassini*, Ridg.		
Nearc.	,, *ridgwayi*, Nel. & Pal.		
Neot.	,, *cooperi*, Ridg.		
Neot.	,, *ustus*, Scl. 12.		
Neot.	,, *brasilianus* (Gm.). 36.		
Neot.	,, *guatemalæ*, Sharpe. 10.		

* United by Mr. W. T. Blanford under the name of *S. bakkamœna*, Ibis, 1894, p. 527; but in 1880 my father considered *S. malabaricus* and *S. lempiji* to be the same, in which he followed Blyth.

† United by Mr. Blanford.

Nearc. *Scops hastatus,* Ridg.
Neot. „ *vermiculatus,* Ridg.
Nearc. „ *aspersus,* Brew.
Nearc. „ *vinaceus,* Brew.
Nearc. „ *asio,* Linn. 6 and egg.
Nearc. „ *floridanus,* Ridg. 2 and egg.
Nearc. „ *mccallii,* Cass. 3.
Nearc. „ *bendirei,* Brews. 2 and egg.
Nearc. „ *kennicottii,* Elliot. 2.
Nearc. „ *maxwelliæ,* Ridg. 3 and egg.
Nearc. „ *trichopsis,* Wag. 5.
Nearc. „ *aikeni,* Brews.
Nearc. „ *macfarlanei,* Brews.
Neot. „ *flammeolus,* Kaup. 2.
Nearc. „ *idahoensis,* Merr.
Nearc. „ *pinosus,* Nel. & Pal.
E. *Gymnoscops insularis,* Tristram.
Neot. *Pseudoscops grammicus* (Kaup). 3.
Neot. *Lophostrix stricklandi,* Scl. & S. 3.
Neot. „ *cristatus* (Daud.). 1.
P., I. *Ketupa ceylonensis* (Gmel.). 8.
I. „ *flavipes* (Hodg.). 2.
I. „ *javanensis,* Less. 20 and skel.
I. *Pseudoptynx philippensis,* Kaup. 2.
I. „ *gurneyi,* Walden. 1.
P. „ *blakistoni* (Seebohm). 1 and skel.
Neot. *Bubo magellanicus,* Gm. 4 and skel.
P., I. „ *ignavus,* Forst. 19, skel., and eggs.
P. „ *sibiricus* (Scl. & S.). 5.
E., P. „ *ascalaphus,* Savigny. 4.
I. „ *bengalensis* (Frankl.). 6.
E. „ *capensis,* Smith. 2.
E. „ *abyssinicus,* Sharpe. 1.
E. „ *africanus* (Temm.). 7, skel., and eggs.
E. „ *lettii* (Büttikofer).
Nearc., Neot. „ *virginianus* (Gmel.). 19.
Nearc. „ *arcticus* (Swainson). 4.
Nearc. „ *subarcticus* (Hoy). 1 and egg.

Nearc. *Bubo saturatus*, Ridg. 2.
Nearc. „ *pacificus*, Cassin. 1.
Neot. „ *nigrescens*, Berlepsch.
I. *Urrua coromanda* (Steph.). 3.
I. *Huhua orientalis* (Horsf.). 5.
I. „ *minor* (Sch.).
E. „ *lacteus* (Temm.). 6.
E. „ *shelleyi*, Sharpe & Us. 1.
E. „ *poensis* (Fraser). 3.
E. „ *leucosticta* (Hartl.). 1.
E. „ *cinerascens* (Guér.). 6.
I. „ *nipalensis* (Hodg.). 7.
E. *Scotopelia peli*, Bp. 2.
E. „ *bouvieri*, Sharpe.
E. „ *ussheri*, Sharpe. 1.
E. „ *oustaleti*, Rochebrune.
E. *Tybo* * (*Myrtha*, Bp.) *woodfordi* (Smi.). 5.
E. „ „ *nuchale* (Sharpe). 4.
E. „ „ *bohndorffi* (Sharpe).
I. „ „ *ocellatum* (Less.). 2.
I. „ „ *seloputo* (Horsf.). 4.
I. „ „ *wiepkeni* (Blasius). 1.
I. *Bulaca leptogrammica* (Temm.). 6.
I. „ *indrani* (Sykes). 6.
I. „ *maingayi*, Hume.
I. „ *newarensis*, Hodg. 4.
Neot. *Ciccaba nigrolineata* (Sclater). 2.
Neot. „ *huhula* (Daud.) 4.
Neot. *Macabra albitarsis* (Scl.). 5.
Neot. „ *albogularis* (Cass.). 7.
Neot. „ *superciliaris* (Pelzeln). 2.
Neot. „ *suinda* (Vieill.). 4.
Neot. „ *virgata* (Cass.). 18.
Neot. *Pulsatrix torquata* (Daud.). 9.
Neot. „ *melanota* (Tschudi). 2.
Neot. „ *spilonota* (Gray).
Nearc. *Syrnium nebulosum* (Forster). 4.

* Nomencl. Mus. Hein. p. 252.

Nearc. *Syrnium alleni* (Ridg.). 2.
Neot. „ *sartorii*, Ridg. 2.
Neot. „ *fulvescens*, Scl. & S. 4.
Nearc. „ *occidentale*, Xantus. 1.
Neot. „ *rufipes* (King).
I. „ *nivicolum*, Blyth. 4.
I. „ *biddulphi*, Scully.
I. „ *davidi*, Sharpe.
P. „ *aluco* (Linn.). 22 and eggs.
P. „ *rufescens* (Temm. & S.). 7.
P. „ *uralense* (Pall.). 6.
Nearc. „ *cinereum* (Gm.). 2.
P. „ *lapponicum* (Retzius). 13 and eggs.
I. „ *niasense*, Salvad.
P., Nearc. *Nyctea scandiaca* (Linn.). 21, skel., and eggs.
Nearc. *Surnia funerea* (Linn.). 6.
P. „ *doliata*.
P. „ *ulula* (Linn.). 13.
P. *Nyctala tengmalmi* (Gm.). 12.
Nearc. „ *richardsoni*, Bp. 2.
Nearc. „ *acadica* (Gm.). 6.
Neot. *Gisella harrisii* (Cass.). 1.
Nearc., Neot. *Micropallas whitneyi* (Cooper). 2.
Neot. „ *graysoni*, Ridg.
P. *Microptynx passerina* (Gmel.). 5.
P. „ *orientale* (Tacz.).
Neot. *Glaucidium nanum* (King). 4.
Neot. „ *jardinei* (Bp.). 11.
Neot. „ *griseiceps* (Sharpe). 1.
Neot. „ *phalænoides* (Daud.). 2.
Neot. „ *ferrugineum* (Max.). 20.
Neot. „ *ridgwayi*, Sharpe. 17.
Neot. „ *siju* (D'Orb.). 6.
Nearc. „ *gnoma*, Wagler. 9.
Neot. „ *californicum* (Scl.). 2.
Neot. „ *hoskinsii*, Brewster.
Neot. „ *pumilum* (Temm.). 6.
Neot. „ *cobanense*, Sharpe.
Nearc. „ *fisheri*, Nel. & Pal.

Neot.	*Pholeoptynx cunicularia*, Kaup. 9.	
Neot.	,, *floridani* (Ridgway). 2.	
Neot.	,, *bahamensis* (Cory).	
Neot.	,, *dominicensis*, Cory. 1.	
Nearc., Neot.	,, *hypogæa* (Woodh.). 5 and egg.	
Neot.	,, *guadeloupensis* (Ridg.).	
Neot.	,, *amaura* (Lawrence).	
Nearc.	,, *rostrata* (Townsend).	
Neot.	*Gymnoglaux nudipes* (Daud.). 4.	
Neot.	,, *lawrencii*, Scl. & S.	
E.	*Tænioglaux capensis* (Smith). 5.	
I.	,, *castanoptera* (Horsf.). 2.	
I.	,, *castanonota* (Blyth). 5.	
I.	,, *radiata* (Tickell). 9.	*
I.	,, *malabarica* (Blyth). 6.	*
I.	,, *cuculoides* (Gould). 13.	
I.	,, *whitelyi* (Blyth). 9.	
E.	*Microglaux perlata* (Vieill.). 24.	
Neot. ?	,, *tephronota* (Sharpe).	
I.	,, *brodiei* (Burton). 7.	
I.	,, *sylvatica* (Müll.).	
I.	,, *borneensis* (Sharpe).	
I.	,, *pardalota* (Swinhoe) †. 5.	
I.	*Heteroglaux blewitti*, Hume.	
P.	*Athene noctua* (Scop.). 10, skel., and egg.	
P.	,, *meridionalis* (Risso). 11 and egg.	
P.	,, *plumipes typicus*, Swinhoe. 3.	
P.	,, ,, *meridionalis*, Menzbier.	
I.	,, *brama* (Temm.). 16 and egg.	
A.	*Spiloglaux odiosa* (Scl.). 1.	
A.	,, *boobook* (Lath.). 11 and egg.	
A.	,, *rosseliana* (Trist.).	
A.	,, *ocellata* (H. & J.). 1.	
A.	,, *maculata* (V. & H.). 7.	
New Z.	,, *novæ-zealandiæ* (Gm.). 6.	
New Z. ?	,, *albaria* (Ramsay).	
A.	,, *fusca* (Vieill.).	

* United by Mr. Blanford.

† United with *M. brodiei* by Dr. Sharpe (Ibis, 1893, p. 550).

A. *Hieraglaux humeralis* (H. & J.). 1.
A. „ *strenuus* (Gould). 4.
A. „ *connivens* (Lath.). 7.
A. „ *occidentalis* (Rams.).
A. „ *rufistrigata* (Gray).
A. „ *assimilis* (S. & D'Albert.). 2.
A. „ *dimorpha* (Salvad.). 2.
E. „ *superciliaris* (Vieill.). 2.
A. „ *punctulata* (Q. & G.). 2.
A. „ *rudolphi* (Meyer).
A. „ *granti* (Sharpe).
A. „ *squamipila* (Bp.). 1.
A. „ *forbesi* (Scl.). 1.
A. „ *natalis* (Lister).
A. „ *hypogramma* (Gray). 6.
A. „ *hantu* (Wall.).
A. „ *variegata* (Q. & G.).
A. *Ninox goldii*, Gurney. 3.
I. „ *innominata*, Hume. 3.
I. „ *nipalensis* (Hodg.). 3.
I. „ *borneonensis* (Bp.). 10.
A. „ *goodenoviensis*, De Vis.
A. „ *theomacha* (Bp.). 6.
I. „ *obscura*, Hume.
I. „ *spilocephalus*, Tweed. 1.
I., P. „ *japonica* (Sch.). 14.
I. „ *scutulata* (Raff.). 4. } *
I. „ *lugubris* (Tick.). 5. } *
I. „ *affinis*, Tytler. 3. } *
I. „ *philippensis*, Bp. 4.
I. „ *reyi*, Oustalet.
A. „ *macroptera*, Blas.
A. „ *ochracea* (Sch.).
A. „ *lurida*, De Vis.
New Z. *Sceloglaux* † *albifacies* (Gray). 1.

* United by Mr. Blanford in his important paper on the Indian Owls, Ibis, 1894, p. 524.

† Our *Sceloglaux* is paler than the late Mr. Rowley's two which I saw last March, perhaps faded.

Strigidæ.

[Four genera.]

I.	*Photodilus badius* (Horsf.). 7.	*
I.	,, *nipalensis*, Hume. 2.	*
I.	,, *assimilis*, Hume. 2.	
E.	*Scelostrix capensis* (Smith). 6.	
I.	,, *pithecops* (Swin.). 1.	
I.	,, *candida* (Tick.). 1.	
I.	,, *amaurota* (Cab.). 5.	
P., E.	*Strix flammea*, Linn. 28, skel., and eggs.	†
Neot.	,, *bargei*, Hartert.	†
Neot.	,, *nigrescens*, Laur.	†
Neot.	,, *perlata*, Licht. 18.	†
Neot.	,, *glaucops*, Kaup.	†
Neot., Nearc.	,, *pratincola*, Bp. 12.	‡ †
Neot.	,, *furcata*, Temm. 6.	‡ †
E.	,, *poensis*, Fraser. 21.	†
I.	,, *javanica*, Gm. 22.	†
A.	,, *delicatula*, Gould. 12.	†
A.	,, *rosenbergii*, Sch. 5.	†
A.	,, *inexpectata*, Sch.	†
A.	,, *novæ-hollandiæ*, Stephen. 5 and skel.	
A.	,, *sororcula*, Sclater.	
A.	,, *castanops*, Gould. 2.	
A.	,, *arfaki*, Schl. 1.	
A.	,, *tenebricosa*, Gould. 2.	
A.	,, *aurantia*, Salvad. 2.	
E.	*Heliodilus soumagnei*, Grandidier. 1.	

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* In the opinion of Mr. Blanford, to whose supervision the Indian part of these lists is greatly indebted, *P. badius* and *P. nipalensis* are the same.

† Under Dr. Sharpe's arrangement these would all be considered as one species. If they are to be "lumped together," to be consistent several of the genus *Scops* ought to be united too.

‡ Ibis, 1884, p. 435.

The principal Desiderata in Norwich Museum.*

Gymnoscops insularis, Tristram: Seychelles Islands.—My father remarks that a female brought home in 1888 by Mr. Lister from Capucin, Mahé, was "somewhat paler and more rufous than the figure in 'The Ibis' (1880, p. 458), and with the under surface almost exactly like *S. leucospilus*, with the addition of some fine transverse markings on the lowest ventral feathers."—J. H. G., *MS.*

Bubo lettii, Büttikofer: Liberia in W. Africa.—Described in 'Notes from Leyden Museum,' 1889, p. 34, plate vi.† My father apparently doubted if this Owl, which the describer compares to *Lophostrix cristatus*, was rightly assigned to *Bubo*. The wing is stated to be only 28 cm. = 10·4 inches.

Scotopelia bouvieri, Sharpe: Gaboon, Liberia, Angola.—Cat. of Birds in B. M. ii. p. 11, plate i.

Tybo (*Syrnium*, *Myrtha*) *bohndorffi* (Sharpe): Central Africa, Nyam Nyam country (Bohndorff), Muata-Yamvo (M. A. Sesinando Marques).—"Allied to *Syrnium nuchale*, but the specimen in the British Museum is much more rufous."—J. H. G., *MS.* Two more are recorded by Bocage.

Syrnium rufipes (King): Patagonia and Chili.—"A small member of the same group as *S. nebulosum*, *S. fulvescens*, and *S. occidentale*. Examined at British Museum, July 1884; also examined one in Salvin and Godman's collection, April 1885. A very distinct species."—J. H. G., *MS.*

Syrnium biddulphi, Scully: North of India.—Figured Ibis, 1881, p. 423. Dr. Scully's birds were examined by my father, who writes:—"Like *S. aluco*, but greyer and larger, ... Hume doubts its distinctness (see 'Stray Feathers,' ix. p. 311, footnote)."—J. H. G., *MS.*‡

Syrnium davidi, Sharpe: China.—'Les Oiseaux de la Chine,' vol. i. p. 44, pl. ii. Stated to be larger than *S. nivicolum* and *S. biddulphi*.

Syrnium niasense, Salvadori: Sumatra.—Allied to *S. myrtha*

* Other desiderata enumerated, p. 55.

† Also figured in Büttikofer's 'Reisebilder aus Liberia,' ii. pl. xxxi., where there is less white shown on the horns.

‡ Mr. Blanford thinks *S. biddulphi* entitled to separation.

and *S. leptogrammicum*. This Owl was brought under my father's notice by Count Salvadori in February 1887, and in May described in 'Annali del Museo Civico di Storia Naturale di Genova,' iv. p. 15.

Micropallas graysoni, Ridgway: Socorro, Mexico.—Like *M. whitneyi*, but browner.

Heteroglaux blewitti, Hume: Central India.—"General appearance not unlike *Athene brama*" (Stray Feathers, i. p. 468), to which genus Mr. Blanford thinks it belongs.

Spiloglaux rosseliana (Tristram): Rossel Island, New Guinea.—"Nearest to the Australian *Ninox boobook*, though very much smaller" (Ibis, 1889, p. 557).

Hieraglaux natalis (Lister): Christmas Island, in the Australian ocean.—P. Z. S. 1888, p. 525. "Only specimen [obtained] in the British Museum. Comes nearest to *Ninox forbesi*."—J. H. G., *MS.*

Hieraglaux granti (Sharpe): Solomon Islands.—P. Z. S. 1888, p. 183. Comes nearest to *H. punctulata*.

Strix sororcula, Sclater: Timor Laut.—"Examined at Brit. Mus., July 1884. Very small and quite distinct: in tints of plumage resembling *S. novæ-hollandiæ* (see Salvadori, 'Aggiunte alla Ornitologia della Pap.,' 1889, p. 25)."—J. H. G., *MS.*

Subjoined is the celebrated Nitzsch's classification of Owls, based on the feather-tracts, accurately transcribed by a kind friend, and which is to be found in much fuller detail in the translation of his 'Pterylography,' edited by Mr. Sclater, pp. 67–71 and plate ii :—

I. Owls with the outer branch of the inferior tract free posteriorly.

A. With scapular portion of spinal tract forming a deeply divided fork.

a. With ear-tufts.

1. Bubo.
2. Otus.
3. Scops.

b. Without ear-tufts.

(Tawny Owl, Ural Owl, Lapp Owl, Snowy Owl.)

B. With scapular portion of spinal tract briefly cleft.

a. With a tolerably distinct fork.

(Hawk-Owl, Burrowing-Owl, Sparrow-Owl.)

b. With a scarcely perceptible fork.

(Little Owl, Tengmalm's Owl, etc.)

II. Owls in which the outer branch of the inferior tract returns into the stem posteriorly.

"Disk-Owls,"—*i. e.* "Barn-Owls" of all sorts for which he proposed the name *Hybris*.

This and other classifications are very ably commented upon in the 'Dictionary of Birds,' art. "*Owl*," to be published very shortly *, for a sight of the proof-sheets of which I am indebted to Professor Newton. Messrs. Sclater and Salvin's classification is given in the 'Ibis' for 1879, p. 351.

Summary of Species.

	Accipitres.	Striges.
Neotropical	124	58
Ethiopian	102	33
Australian	83	43
Indian	78	73
Palæarctic	51	24
Nearctic	30	33
New Zealand	2	3
Cosmopolitan	...	1
	470	268
In Norwich Museum	403	195
Desiderata	67	73

The above summary includes all the species and subspecies of Birds of Prey—*i. e.*, all known and accepted as such on the best obtainable evidence up to November 1st, 1894. At least one specimen of every species given in the preceding lists as forming part of the collection at Norwich will be found stuffed and on view at the Castle Museum. This is more than can be said for our great National Museum at Kensington, where it is only possible for a selection to be exhibited.

* This valuable article is almost *verbatim* the same which appeared in the 'Encyclopædia Britannica' in 1884.

CHAPTER IV.

ON A RAPTORIAL BIRD TRANSMITTED BY Mr. ANDERSSON FROM DAMARA LAND.

By the late Mr. J. H. GURNEY.

[Reprinted from the 'Transactions of the Zoological Society' for 1865 (p. 117).]

The raptorial bird now exhibited has been recently sent to me, with some other birds collected in Damara Land, by my friend Mr. Charles J. Andersson, to whose exertions we have already been frequently indebted for valuable contributions to our knowledge of the ornithology of that part of South-western Africa.

Mr. Andersson remarks, with reference to the present specimen, which was procured at Objimbinque, Damara Land, on the 10th of March last, "I have only obtained this individual, a female, shot by my servant, who observed another, which was probably the male. I imagine I have once or twice observed this species near my place (Objimbinque) just before dusk. I strongly suspect that it is a nocturnal or seminocturnal bird. I found only a Bat in the stomach of the specimen sent, of which the description and measurements are as follows :—

"Irides bright lemon-yellow; extremities of mandibles black; basal parts and gape bluish lead-colour; tarsi and toes bluish white; claws bluish black.

"Entire length 1 ft. $6\frac{2}{12}$ in.; length of wings when folded 1 ft. $1\frac{11}{12}$ in.; length of tarsus $2\frac{5}{12}$ in.; length of middle toe $2\frac{1}{12}$ in.; length of tail $7\frac{6}{12}$ in.; length of bill from corner of gape to the tip of the mandible, straight, $1\frac{9}{12}$ in."

To the above remarks of Mr. Andersson I have to add the following :—The colours of the plumage are dark brown mingled with pure white, the tint of the brown being very similar to that of a dark specimen of *Buteo vulgaris*; a very few feathers of a still darker tinge, however, are apparent on

the occiput and back. With the exception of a line of white above and below the eye, the feathers on the upper part of the head are brown: this colouring extends slightly below the gape, and also over the whole of the upper surface of the bird, including the wings and tail; but the basal parts of the feathers on the upper part of the head, the nape, and back are white, though this is not apparent except when a feather is displaced; but this white becomes somewhat more visible where it is mingled with the brown, in the form of bars and spots, on all the feathers of the wings, both above and below, and including the upper and under wing-coverts, as also on the upper and under tail-coverts; the upper surface of the tail bears five transverse bars of a pale brown, which on the lower surface of the tail-feathers are white, and the tail is also very slightly tipped with dirty white. The throat is white, but is bisected for the upper three-fourths of its length by a brown medial line, starting from the angle of the lower mandible, and extending for about 3 inches in a straight line towards the sternum. The feathers of the breast and sides are of a mingled brown and white, the latter predominating in the vicinity of the throat.

The abdomen and inner sides of the thighs are white, the outer sides of the thighs are brown, the plumage of the thighs also extending over about one-fifth of the upper portion of the tarsus.

The occipital feathers are lanceolate and slightly darker (some of them being also a little longer) than the feathers of the adjacent plumage, thus presenting an appearance similar to that which is frequently to be observed in adult specimens of *Pernis cristatus*.

Of the primary feathers the third is the longest, the second next, then the fourth, the fifth, and the first successively; the points of the primaries, when closed, reach to within three-quarters of an inch of the tip of the tail.

The tail, which consists of twelve feathers, is very slightly forked, the centre feathers being the shortest, and the pair next to the outside pair the longest.

The bill is singularly small for the size of the bird; but

the gape is very large, extending backwards till it reaches a point directly below the centre of the eye. Between the eye and the upper mandible a row of small bristles takes its rise, pointing towards and extending over the upper edge of the mandible as far as the nostrils, which are uncovered and of a narrow oval form. As in the case of the American Vultures, there appears to be no septum between the nostrils. The ridge of the upper mandible is remarkably keel-shaped, and there is a very noticeable depression intervening between it and the cutting-edge of the mandible, which latter is entirely destitute of anything in the nature of a tooth, a notch, or a festoon.

The tarsi and toes are slender in their character, and the scales with which they are covered are (with the exception of those covering the last joint of each toe) remarkably small. The middle toe, which is considerably elongated, has a prominent roughened pad below each end of the last joint; the inner toe is similarly provided, but with the hinder pad thrown further back; the outer toe has two of these appendages situated as those on the middle toe, and two others placed further back; the hinder toe has one large pad only, seated immediately behind the root of the claw.

The inner edge of the middle claw projects laterally, and appears to me to present a rudimentary pectination resembling that which is found in the Owls, a tribe to which the present species seems also to offer some resemblance in the form of its bill and the extent of its gape.

P.S.—I had intended proposing the name of *Stringonyx anderssoni* for this singular form, supposing it to be undescribed; but, as has been pointed out by Mr. Bartlett since my paper was read *, it is no doubt identical with the *Machærhamphus alcinus* of Westerman †, the type of which is in the Museum at Leyden. The present specimen has been added to the collection in the Norwich Museum.

* Proc. Zool. Soc. 1866, p. 324.

† Westerm. Bijd. t. d. Dierk. i. p. 29.

[End of reprint.]

The genus *Machærirhamphus*, Westerman, to which *Stringonyx*, Gurney, P. Z. S. 1865, p. 618 (so named from its resemblance in the middle claw to Owls of the genus *Strix*), has to give way, consists of three species :—

M. anderssoni, Gurney,
M. revoili, Oustalet,
M. alcinus, Westerman.

Machærirhamphus anderssoni, the subject of one of my father's most important papers, here reprinted (but without the Plate), was described by him from a female shot in 1865 by Svante, a servant of the well-known explorer Charles J. Andersson, subsequently shown to be a young bird ('Ibis,' 1879, p. 468).

Andersson's specimen was obtained in Damara Land, but my father notes * that it has also been obtained at Loango in Angola (Bocage *fide* Falkenstein) and that Mr. H. H. Johnston observed it at Vivi on the river Congo, which is about 100 miles from the west coast. Three or four have been procured in Madagascar and it has been found in the Comoro Islands (J. f. O. 1890, p. 110).

Besides the type of *M. anderssoni* in Norwich Museum, my father adds that there are one at Cambridge, and three in the National Collection, including what may have been the pair to ours, which, it appears from Andersson's memorandum, was killed at Ondunga Ovampo, 12th May or March, 1866. He was further informed by Mr. L. Lloyd that Andersson had written to him, under date of February 10th, 1867, of his having obtained a third; but if this example was preserved its whereabouts is not known now.

In addition to Wolf's illustration of my father's paper, where the head (which has the largest gape in proportion to its beak of any bird of prey) is separately figured, there is a good figure of a much darker example in the 'Ois. de Madagascar.' Mr. Wolf's original drawing correctly depicted the tarsi and toes of the bird bluish white, which the colourist of the printed plate unfortunately changed to buff colour. In 'The Birds of Damara Land,' p. 394, there is a drawing

* J. H. G. MSS. notes.

of the sternum, which seems to be very like that of *Buteo vulgaris*, and the eggs, which are not yet known, although nests of both *M. anderssoni* and *M. alcinus* have been discovered, will probably be of the same type. My father uses the English name of "Andersson's Pern"*, and puts *Machærirhamphus* between the Honey-Buzzards and *Rostrhamus*, tenth in the subfamily Milvinæ, remarking that:—"All the Pernine genera consist of birds with relatively short tarsi, except *Machærhamphus*, in which the tarsus is proportionately longer, as it is also in *Rostrhamus* amongst the Milvinæ, a similarity which induces me to consider *Machærhamphus* in immediate succession to *Rostrhamus*, notwithstanding the great difference in the form of the bill. This form in each case is unique, but affords a strong contrast between the extremely elongated upper mandible of *Rostrhamus* and the remarkably contracted one of *Machærhamphus*, in which genus the bill is smaller in proportion than in any other Raptorial bird, though this peculiarity is combined with a gape proportionally larger than that of any other of the Raptores. The outline of the bill and the very wide gape in both species of *Machærhamphus* may well remind the observer of the corresponding parts in the Caprimulgine genus *Nyctibius*." ('Ibis,' 1879, p. 464.)

His remarks on the plumage of *Machærirhamphus*, and particularly on the fuliginous colour of the Madagascar examples, will repay perusal. He also dwells on two characteristics which have not been elsewhere noticed:—"The first of these is the unusual relative length of the feathers composing the under tail-coverts, the upper coverts being also long, but less remarkably so than the lower. . . . . The second peculiarity which I am desirous of noticing is that the interdigital membrane between the middle and outer toe, which exists in many birds of prey, is developed to an unusual extent in the genus *Machærhamphus*, reaching to the first joint of the outer, and beyond the first joint of the middle toe, and filling up almost the entire space between these two points." (*L. c.* p. 466.)

* And in the Museum MS. Catalogue "Keel-bill Pern."

The allied *Machærirhamphus alcinus* inhabits the Australian and Indian Regions and does not come within 2500 miles of *M. anderssoni*. It is not such a rare bird in collections as that species, but like it has a partiality for Bats (Gurney, 'Zoologist,' 1885, p. 114), is crepuscular, and takes its prey on the wing like a Swallow (Pryer, *l. c.* p. 48). My father, who went to Leyden in 1869 to examine the type, remarks that "the peculiar carinated ridge on the upper mandible is more sharply defined by a channel on either side in *M. alcinus* than in *M. anderssoni*, and the transverse bars on the wings and tail appear to be always present in *M. anderssoni*, but absent in *M. alcinus*" (*l. c.* p. 467). There does not seem to be much difference in size between the two, but *M. alcinus* has generally by far the longest crest. In 1889 Mr. W. E. Clarke sent my father a photograph of the head of a *Machærirhamphus alcinus*, received at the Edinburgh Museum from Selangor, in the Straits of Malacca, remarkable for having a large white spot both above and below the eye. Mr. Clarke permits me to quote from my father's correspondence about this photograph:—

"On examining the two specimens of *Machærhamphus* at Norwich, I find that the one from New Guinea [obtained by Mr. Goldie] differs from yours in having a little white on the nape, no crest, and no white above or below the eye. Our Bornean bird [obtained by Mr. Everett] resembles your photograph, except that the white above and below the eye merely exists as a very narrow and ill-defined streak. . . . . Westerman's figure (Bijdr. tot de Dierkunde, 1848) of the type of *M. alcinus* at Leyden shows a crest, but no white either above or below the eye. A Tenasserim male very fully described by Mr. Hume in 'Stray Feathers,' vol. iii. p. 269, had a snow-white band over and below the eye. Mr. Hume considers this to be an adult specimen."

M. revoili, the remaining species, is only known by the type obtained in Somali-land by M. Georges Revoil. It was described in 1886 by M. Oustalet as resembling *M. anderssoni* in the wings and tail, but with an occipital crest and a white patch on the neck, like *M. alcinus*. My

father copies M. Oustalet's description, but expresses no opinion as to its validity, and we must await the arrival of more specimens.

The generic name of these birds, bearing allusion to the scimitar-like beak, was conferred in 1848 by G. F. Westerman, who spelled it *Machærhamphus*, altered by Schlegel into *Macheirhamphus* and by Hartlaub into *Macherhamphus*. But by Mr. Sclater's advice I have again changed it into *Machærirhamphus*, which he considers the most proper rendering of two Greek words. Prof. Newton, however, whose advice and assistance I have in many places gratefully to acknowledge, especially as regards the correct spelling of names, would prefer to see it written *Machærorhamphus*.]

APPEAL FOR SPECIMENS.

N.B.—Mr. J. H. Gurney (Keswick Hall, Norwich) wishes to say that he will be glad of any opportunity to purchase skins of any of the following Birds of Prey for the Norwich Museum. Of a few of them much fuller particulars have been already given on pages 30 and 44.

Accipitres.

Sarcorhamphus (Condor) *magellanicus* (Shaw). Inhabiting Chili and Magellan, S.A.

Gyps (Vulture) *pallescens*, see p. 30. Western and Central India.

Phalcobænus (Caracara) *albigularis* (Gould). Patagonia. Voy. of 'Beagle,' pt. iii. plate i.

Eutriorchis astur, p. 30. P. Z. S. 1875, plate xiii.

Circus (Harrier) *spilothorax*, Salvad. Molucca Islands.

Circus humbloti, Milne-E. et Gr. Comoro Islands, Madagascar. N. Arch. Mus. x. p. 234; figured in 'Ois. de Madagascar.'

Circus philippinensis, Steere. Philippine Islands.

Melierax (Chanting-Hawk) *poliopterus*, Cabanis. Somali, E. Africa. Only about three specimens are recorded.

Nisoides moreli, p. 30.

Urospizias (Australian Hawk), see p. 20. Eleven subspecies.

Accipiter (Sparrow-Hawk) *fringilloides*, p. 30.

Accipiter büttikoferi, Sharpe. Liberia in West Africa. ('Reisebilder aus Liberia,' plate xxx.)

Accipiter rufotibialis, p. 30.

Cooperastur (American Hawk) *poliogaster*, p. 31.

Cooperastur gundlachii, p. 31.

Megatriorchis doriæ (New Guinea Goshawk) *, p. 31.

Morphnus (American Hawk-Eagle) *tæniatus*, G., p. 31.

Limnaëtus (Hawk-Eagle) *andamanensis*, Tytler. Andaman Islands, in the Bay of Bengal.

Thalassaëtus (Sea-Eagle) *branickii*, p. 31.

Buteo (Buzzard) *socorroensis*, Ridg. Socorro Island, South America.

Rupornis (Buzzard-Hawk) *saturata* (Scl. & Salv.). Bolivia in South America.

Rupornis gracilis, p. 31.

Leucopternis (South-American Buzzard) *princeps*, p. 32.

Leucopternis occidentalis, p. 32. Loxa or Puna Island, Ecuador.

Leucopternis plumbea, p. 32. Panama and Ecuador. ('Ibis,' 1872, plate viii.)

Rostrhamus (Awl-bill Kite) *hamatus*, p. 32.

†*Pternis* (Honey-Buzzard) *tweeddalii*, p. 32.

Regerhinus (American Pern) *wilsoni*, p. 32.

Baza magnirostris, Gray. Luzon, Philippine Islands. (Cat. Birds in B. M. i. plate x.)

Baza leucopais, Sharpe. Palawan Island, near Borneo. ('Ibis,' 1890, plate ii.)

Spiziapteryx circumcinctus, p. 32.

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* At p. 31 it is erroneously stated that *M. doriæ* has been found in Australia, it being in fact only known as yet by two specimens, one from Hall Bay, the other from the Astrolabe Mountains, both localities in S.E. New Guinea. I have misunderstood Dr. Sharpe's remarks, which apply to its nearest-known ally, *Erythrotriorchis radiatus*.

† *Pternis* is the spelling adopted in Newton's 'Dictionary,' p. 426.

STRIGES.

Scops (Scops Owl) *leucopsis* (Hartlaub). Island of St. Thomas, off the Congo coast, West Africa. (Beitr. Orn. W.-Afr. plate i.)

Scops balli, Hume. Andaman Islands, in the Bay of Bengal. (Figured in the Sc. Results of 2nd Yarkand Mission, Supp.)

Scops longicornis, Grant. Luzon, Philippine Islands.

Scops solokensis (Hartert). Sumatra.

Scops rufescens (Horsfield). Sumatra, Borneo, and Malacca.

Scops barbarus, Scl. & Salv. Guatemala ('The Auk,' 1893, p. 262); Mexico (Proc. Acad. N. S. Philadelphia, 1890, p. 129).

Gymnoscops (Scops Owl) *insularis*, p. 44.

Bubo (Eagle-Owl) *lettii*, p. 44.

Scotopelia (Great African Owl) *bouvieri*, Sharpe, p. 44.

Tybo (Wood-Owl) *bohndorffi*, p. 44.

Bulaca (Wood-Owl) *maingayi* (Hume). Malay Peninsula.

Syrnium (Wood-Owl) *rufipes*, p. 44.

Syrnium davidi, p. 44.

Syrnium niasense, p. 44.

Micropallas (Micrathene) *graysoni*, p. 45.

Glaucidium (Owlet) *cobanense*, Sharpe. Coban, Vera Paz, Guatemala. (Cat. of Birds in B.M. ii. plate xiii.)

Glaucidium hoskinsii, Brewster. Lower California.

Pholeoptynx (Burrowing-Owl) *bahamensis* (Cory). Bahama Islands, North Atlantic.

Heteroglaux (Little Owl) *blewitti*, p. 45.

Gymnoglaux lawrencii, Scl. & Salv. Cuba.

Microglaux (Owlet) *borneensis* (Sharpe). Kalulong and Kina Balu in Borneo.

Spiloglaux (Ninox) *rosseliana*, p. 45.

Spiloglaux albaria (Ramsay). Lord Howe's Island, Australia.

Spiloglaux fusca (Vieill.). Timor Island. (Cat. of Birds in B.M. ii. plate xii.)

Hieraglaux (Ninox) *occidentalis* (Ramsay). Derby, N.W. Australia.

Hieraglaux rufistrigata (Gray). Gilolo, Moluccas.
Hieraglaux natalis, p. 45.
Hieraglaux granti, p. 45.
Hieraglaux hantu, Wallace. Bouru, Malay Archipelago. (Cat. of Birds in B.M. ii. plate xi.)
Hieraglaux variegata (Q. & G.). New Mecklenburg Island.
Ninox ochracea, (Sch.) Celebes. (Cat. of Birds in B.M. ii. plate xi.)
Ninox macroptera, Blasius. Sanghir Island, Celebes.
Ninox rudolphi, Meyer. Sumba Island, Malay Archipelago. ('Ibis,' 1882, plate vi.)
Ninox obscura, Hume. Andaman Islands. ('Ibis,' 1884, p. 171.)
Strix (Screech Owl) *sororcula*, Sclater, p. 45.
Strix inexpectata, Schlegel. N. Celebes.

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